CDC-R304/X104EE/X204/ X304/X444

SERVICE MANUAL

Ver 1.0 2004. 01

US Model
Canadian Model
CDC-X204/X304/X444
AEP Model
UK Model
CDC-R304/X304
East European Model
CDC-X104EE

Photo: CDC-R304

• The tuner and CD sections have no adjustments.

• CDC-X304: US model/X444
AUDIO POWER SPECIFICATIONS
POWER OUTPUT AND TOTAL HARMONIC DISTORTION
23.2 watts per channel minimum continuous average power into 4 ohms, 4 channels driven from 20 Hz to 20 kHz with no more than 5% total harmonic distortion.

• CDC-X204
AUDIO POWER SPECIFICATIONS
POWER OUTPUT AND TOTAL HARMONIC DISTORTION
22 watts per channel minimum continuous average power into 4 ohms, 4 channels driven from 20 Hz to 20 kHz with no more than 5% total harmonic distortion.

Model Name Using Similar Mechanism	CDX-R3000/R3000T
CD Drive Mechanism Type	MG-611XC-186//Q
Optical Pick-up Name	KSS1000E

SPECIFICATIONS

Tuner section

FM

Tuning range	US, Canadian Model: 87.5 – 107.9 MHz AEP, UK Model: 87.5 – 108 MHz CDC-X104EE: FM1/FM2: 87.5 – 108.0 MHz (at 50 kHz step) FM3: 65 – 74 MHz (at 30 kHz step)
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz/450 kHz
Usable sensitivity	9 dBf
Selectivity	75 dB at 400 kHz
Signal-to-noise ratio	67 dB (stereo), 69 dB (mono)
Harmonic distortion at 1 kHz	0.5% (stereo), 0.3% (mono)
Separation	35 dB at 1 kHz
Frequency response	30 – 15,000 Hz

AM (US, Canadian Model)

Tuning range	530 – 1,710 kHz
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz/450 kHz
Sensitivity	30 µV

AM (CDC-X104EE)

Tuning range	531 – 1,602 kHz
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz/450 kHz
Sensitivity	30 µV

MW/LW (AEP, UK Model)

Tuning range	MW: 531 – 1,602 kHz LW: 153 – 279 kHz
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz/450 kHz
Sensitivity	MW: 30 µV LW: 40 µV

– Continued on next page –

FM/AM COMPACT DISC PLAYER

US, Canadian, East European model

FM/MW/LW COMPACT DISC PLAYER

AEP, UK model

9-877-519-01
2004A04-1
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e Vehicle Company
Published by Sony Engineering Corporation

CD player section

Signal-to-noise ratio	US, Canadian Model: 110 dB AEP, UK Model/CDC-X444: 120 dB
Frequency response	10 – 20,000 Hz
Wow and flutter	Below measurable limit

Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	CDC-R304/X304/X444: 52 W × 4 (at 4 ohms) CDC-X104EE/X204: 45 W × 4 (at 4 ohms)

General

Outputs	Audio outputs terminal (rear/sub switchable) Power antenna relay control terminal Power amplifier control terminal
Inputs	Telephone ATT control terminal (AEP, UK Model/ CDC-X444) Antenna input terminal
Tone controls	Low: ±10 dB at 60 Hz (HIP-HOP) Mid: ±10 dB at 1 kHz (HIP-HOP) High: ±10 dB at 10 kHz (HIP-HOP)
Power requirements	12 V DC car battery (negative ground)
Dimensions	Approx. 178 × 50 × 176 mm (7 1/8 × 2 × 7 in.) (w/h/d)
Mounting dimensions	Approx. 182 × 53 × 161 mm (7 1/4 × 2 1/8 × 6 3/8 in.) (w/h/d)
Mass	Approx. 1.2 kg (2 lb. 10 oz.)
Supplied accessories	Parts for installation and connections (1 set) Front panel case (1) Card remote control RM-Z304 (CDC-X444)

Design and specifications are subject to change without notice.

SERVICE NOTES

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

Notes on Chip Component Replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

TEST DISCS

This set can playback CD-R and CD-ROM discs. The following test discs should be used to check the capability:

CD-R test disc TCD-R082LMT (Part No. J-2502-063-1)
CD-RW test disc TCD-W082L (Part No. J-2502-063-2)

• US, Canadian model

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

• AEP, UK model

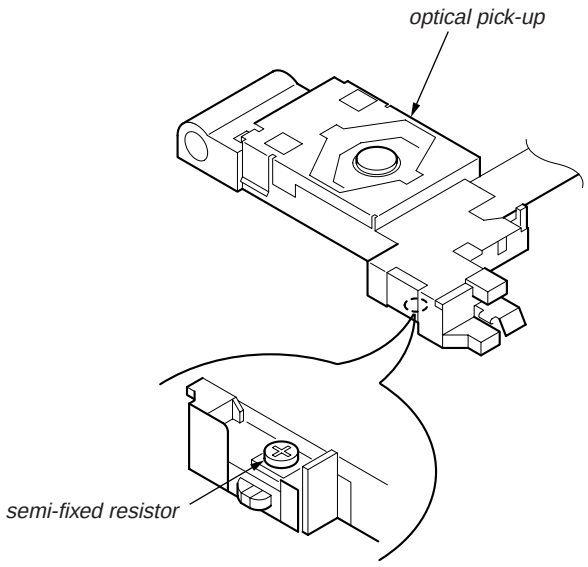
CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

This compact disc player is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT label is located on the exterior.

CLASS 1
LASER PRODUCT

This label is located on the bottom of the chassis.

If the optical pick-up block is defective, please replace the whole optical pick-up block.
Never turn the semi-fixed resistor located at the side of optical pick-up block.



SAFETY-RELATED COMPONENT WARNING!!

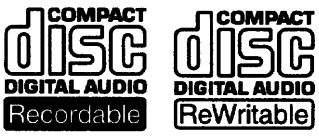
COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

Notes on CD-R/CD-RW discs

- You can play CD-Rs (recordable CDs)/CD-RWs (rewritable CDs) designed for audio use on this unit.
  Look for these marks to distinguish CD-Rs/CD-RWs for audio use.



These marks denote that a disc is not for audio use.

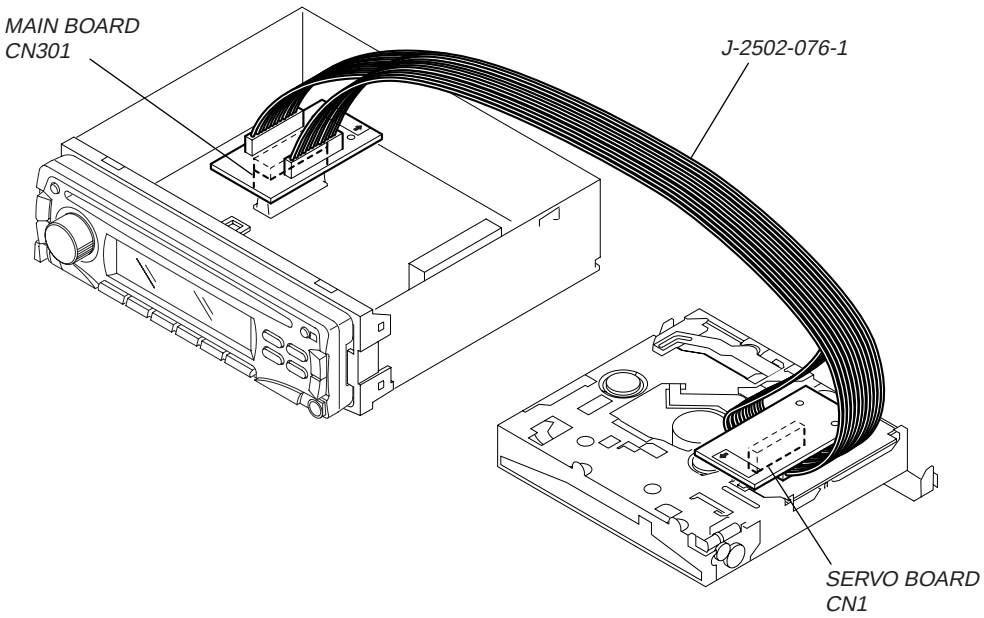
- Some CD-Rs/CD-RWs (depending on the equipment used for its recording or the condition of the disc) may not play on this unit.
- You cannot play a CD-R/CD-RW that is not finalized*.

* A process necessary for a recorded CD-R/CD-RW disc to be played on the audio CD player.

EXTENSION CABLE AND SERVICE POSITION

When repairing or servicing this set, connect the jig (extension cable) as shown below.

- Connect the MAIN board (CN301) and the SERVO board (CN1) with the extension cable (Part No. J-2502-076-1).



● UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead free mark (LF) indicating the solder contains no lead.
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size.)

: LEAD FREE MARK

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40°C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350°C.
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
  Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
  It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

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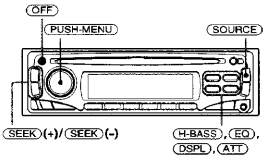
SECTION 1
GENERAL

This section is extracted from instruction manual.

LOCATION OF CONTROLS



Turning the unit on

Press SOURCE on the front panel.
The unit also turns on when you insert a disc.

To deactivate the unit

Press OFF.
The clock appears. After about 10 seconds, the unit switches to DEMO mode (page 4).

To turn the unit off

Press and hold OFF until everything on the display clears.
This operation is required to avoid car battery drain, if your car has no ACC position on the ignition switch.

Setting the clock

The clock uses a 24-hour digital indication.

1 **Press and hold DSPL until the clock appears.**
2 **Turn PUSH-MENU to set the hour.**
3 **Press DSPL.**
4 **Turn PUSH-MENU to set the minute.**
5 **Press DSPL.**

To display the clock

Press DSPL.
To return to the former display, press DSPL again.

Adjusting sound

To adjust the volume

Turn PUSH-MENU.
"VOL (volume)" appears on the display.

To attenuate the sound

Press ATT.
"ATT•ON" appears on the display.
To restore the previous volume level, press ATT again.

To adjust sound stage (DSSA*)

You can adjust sound stage and tone balance to best serve a particular seat in the car.
* DSSA : abbreviation of "Drivers Sound Stage Adjustment"

1 **Press PUSH-MENU.**
2 **Press SEEK (+) or SEEK (–) to select "DSSA."**
3 **Turn PUSH-MENU to select "L" (for the front left seat), "R" (for the front right seat), or "OFF."**

To adjust DSSA manually, press PUSH-MENU after step 3 above, then press SEEK (+) or SEEK (–) to select "BAL" or "FAD," and turn PUSH-MENU to adjust it.

To adjust the sound characteristics

You can adjust the balance, fader, low pass filter and subwoofer volume.

1 **Press PUSH-MENU.**
2 **Press SEEK (+) or SEEK (–) to select "BAL," "FAD," "LPF" or "SUB."**
Each time you press SEEK (+), the item changes as follows:
LOW*1 → MID*1 → HI*1 →
BAL (balance; left-right) →
FAD (fader; front-rear) →
DSSA →
LPF (low pass filter)*2*3 →
SUB (subwoofer volume)*2*4
*1 When EQ is activated (page 6)
*2 When "SUB" is selected (page 12)
*3 The cut off frequency is adjustable to 78 Hz, 125 Hz or OFF.
*4 The volume level is adjustable between –10 and +10, or to ATT (attenuated).
3 **Turn PUSH-MENU to adjust the selected item.**

To reinforce the bass sound (H-BASS)

Press H-BASS.
Each time you press H-BASS, the H-BASS mode is turned on and off.

Note
The H-BASS adjustment does not affect the signal output from the AUDIO OUT REAR connectors on the rear panel.

To set the equalizer (EQ)

You can select an equalizer curve for 7 music types (HIP-HOP, VOCAL, CLUB, JAZZ, POPS, ROCK, CUSTOM).
You can store a different equalizer setting for each source.

To select the equalizer curve

1 **Press SOURCE to select a source (TUNER, CD or AUX).**
2 **Press EQ repeatedly to select the desired equalizer curve.**
To cancel the equalizing effect, select "OFF."

To adjust the equalizer curve

You can adjust and store the equalizer settings for different tone ranges.

1 **Follow the steps 1 and 2 above.**
2 **Press PUSH-MENU.**
3 **Press SEEK (+) or SEEK (–) to select the desired tone range; "LOW," "MID," or "HI."**
4 **Turn PUSH-MENU to adjust to the desired volume level.**
The volume level is adjustable from –10 to +10 dB by 1 dB steps.
5 **Repeat steps 2 to 4 to adjust the equalizer curve.**

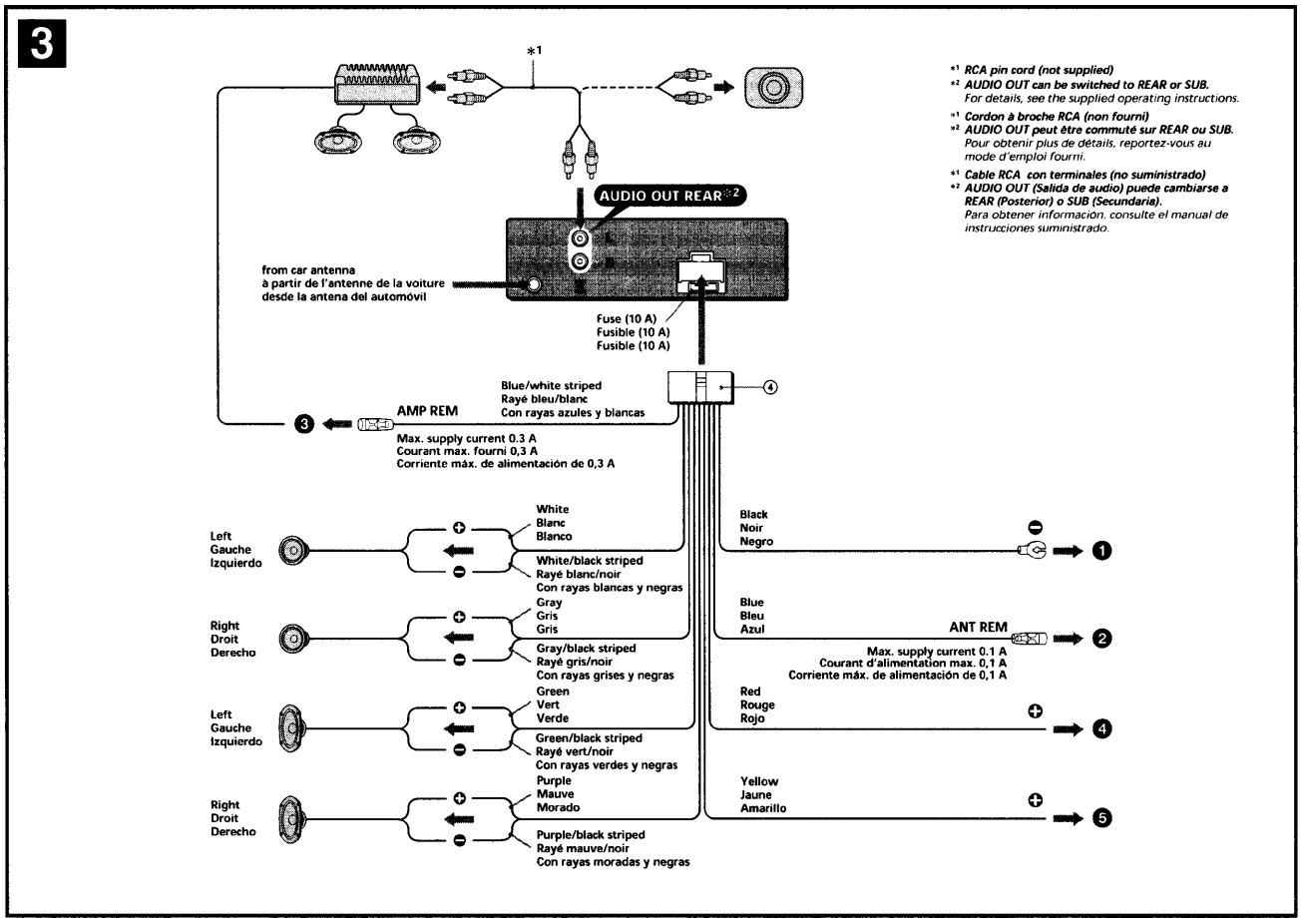
Note
When EQ is set to "OFF," you cannot adjust the equalizer curve settings.

To restore the factory settings

You can restore the factory settings for the equalizer curve settings while adjusting them.

During adjustment, press and hold PUSH-MENU until the equalizer type (such as HIP-HOP) appears on the display.

CONNECTIONS (US, Canadian Model)



*1 *RCA pin cord (not supplied)*
*2 *AUDIO OUT can be switched to REAR or SUB.*
For details, see the supplied operating instructions.

*1 *Cordon à broche RCA (non fourni)*
*2 *AUDIO OUT peut être commuté sur REAR ou SUB.*
Pour obtenir plus de détails, reportez-vous au mode d'emploi fourni.

*1 *Cable RCA con terminales (no suministrado)*
*2 *AUDIO OUT (Salida de audio) puede cambiarse a REAR (Posterior) o SUB (Secundaria).*
Para obtener información, consulte el manual de instrucciones suministrado.

Connection diagram (3)

❶ **To a metal surface of the car**
First connect the black ground lead, then connect the yellow and red power input leads.

❷ **To the power antenna control lead or power supply lead of antenna booster amplifier**

Notes
- *It is not necessary to connect this lead if there is no power antenna or antenna booster, or with a manually-operated telescopic antenna.*
- *When your car has a built-in FM/AM antenna in the rear/side glass, see "Notes on the control and power supply leads."*

❸ **To AMP REMOTE IN of an optional power amplifier**
This connection is only for amplifiers. Connecting any other system may damage the unit.

❹ **To the +12 V power terminal which is energized in the accessory position of the ignition key switch**

Notes
- *If there is no accessory position, connect to the +12 V power (battery) terminal which is energized at all times.*
  Be sure to connect the black ground lead to a metal surface of the car first.
- *When your car has a built-in FM/AM antenna in the rear/side glass, see "Notes on the control and power supply leads."*

❺ **To the +12 V power terminal which is energized at all times**
Be sure to connect the black ground lead to a metal surface of the car first.

Notes on the control and power supply leads
- *The power antenna control lead (blue) supplies +12 V DC when you turn on the tuner.*
- *When your car has built-in FM/AM antenna in the rear/side glass, connect the power antenna control lead (blue) or the accessory power input lead (red) to the power terminal of the existing antenna booster. For details, consult your dealer.*
- *A power antenna without relay box cannot be used with this unit.*

Memory hold connection
When the yellow power input lead is connected, power will always be supplied to the memory circuit even when the ignition key is turned off.

Notes on speaker connection
- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities to avoid its damage.*
- *Do not connect the speaker terminals to the car chassis, or connect the terminals of the right speakers with those of the left speaker.*
- *Do not connect the ground lead of this unit to the negative (-) terminal of the speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Connect only passive speakers. Connecting active speakers (with built-in amplifiers) to the speaker terminals may damage the unit.*
- *To avoid a malfunction, do not use the built-in speaker leads installed in your car if the unit shares a common negative (-) lead for the right and left speakers.*
- *Do not connect the unit's speaker leads to each other.*

Note on connection
If speaker and amplifier are not connected correctly, "FAILURE" appears in the display. In this case, make sure the speaker and amplifier are connected correctly.

Schéma de raccordement (3)

❶ **À un point métallique de la voiture**
Branchez d'abord le fil de masse noir et, ensuite, les fils d'entrée d'alimentation jaune et rouge.

❷ **Vers le fil de commande de l'antenne électrique ou le fil d'alimentation de l'amplificateur d'antenne**

Remarques
- *Il n'est pas nécessaire de raccorder ce fil s'il n'y a pas d'antenne électrique ni d'amplificateur d'antenne, ou avec une antenne télescopique manuelle.*
- *Si votre voiture est équipée d'une antenne FM/AM intégrée dans la vitre arrière/latérale, voir « Remarques sur les fils de commande et d'alimentation ».*

❸ **Au niveau du AMP REMOTE IN de l'amplificateur de puissance en option**
Ce raccordement s'applique uniquement aux amplificateurs. Le branchement de tout autre système risque d'endommager l'appareil.

❹ **À la borne +12 V qui est alimentée quand la clé de contact est sur la position accessoires**

Remarques
- *S'il n'y a pas de position accessoires, raccordez la borne d'alimentation (batterie) +12 V qui est alimentée en permanence.*
  Raccordez d'abord le fil de masse noir à un point métallique du véhicule.
- *Si votre voiture est équipée d'une antenne FM/AM intégrée dans la vitre arrière/latérale, voir « Remarques sur les fils de commande et d'alimentation ».*

❺ **À la borne +12 V qui est alimentée en permanence**
Raccordez d'abord le fil de masse noir à un point métallique du véhicule.

Remarques sur les fils de commande et d'alimentation
- *Le fil de commande de l'antenne électrique (bleu) fournit une alimentation de + 12 V CC lorsque vous mettez la radio sous tension.*
- *Lorsque votre voiture est équipée d'une antenne FM/AM intégrée dans la vitre arrière/latérale, raccordez le fil de commande de l'antenne (bleu) ou l'entrée d'alimentation des accessoires (rouge) à la borne d'alimentation de l'amplificateur d'antenne existant. Pour plus de détails, consultez votre détaillant.*
- *Une antenne électrique sans boîtier de relais ne peut pas être utilisée avec cet appareil.*

Raccordement pour la conservation de la mémoire
Lorsque le fil d'entrée d'alimentation jaune est raccordé, le circuit de la mémoire est alimenté en permanence même si la clé de contact est sur la position d'arrêt.

Remarques sur le raccordement des haut-parleurs
- *Avant de raccorder les haut-parleurs, mettez l'appareil hors tension.*
- *Utilisez des haut-parleurs ayant une impédance de 4 à 8 ohms avec une capacité électrique adéquate pour éviter de les endommager.*
- *Ne raccordez pas les bornes du système de haut-parleurs au châssis de la voiture et ne raccordez pas les bornes des haut-parleurs droit à celles du haut-parleur gauche.*
- *Ne raccordez pas le câble de masse de cet appareil à la borne négative (–) de l'enceinte.*
- *N'essayez pas de raccorder les haut-parleurs en parallèle.*
- *Raccordez uniquement des haut-parleurs passifs. Le raccordement de haut-parleurs actifs (avec amplificateurs intégrés) aux bornes des haut-parleurs peut endommager l'appareil.*
- *Pour éviter tout dysfonctionnement, n'utilisez pas les fils des haut-parleurs intégrés installés dans votre voiture si l'appareil partage un fil négatif commun (–) pour les haut-parleurs droit et gauche.*
- *Ne raccordez pas entre eux les cordons des haut-parleurs de l'appareil.*

Remarque sur le raccordement
Si les haut-parleurs et l'amplificateur ne sont pas raccordés correctement, le message « FAILURE » s'affiche. Dans ce cas, assurez-vous que les haut-parleurs et l'amplificateur sont bien raccordés.

Diagrama de conexión (3)

❶ **A una superficie metálica del automóvil**
Conecte primero el cable de toma a tierra negro, y después los cables amarillo y rojo de entrada de alimentación.

❷ **Al cable de control de la antena motorizada o al cable de fuente de alimentación del amplificador de la antena**

Notas
- *No será necesario conectar este cable si no se dispone de antena motorizada ni de amplificador de antena, o se utiliza una antena telescópica accionada manualmente.*
- *Si el automóvil incorpora una antena de FM/AM en el cristal trasero o lateral, consulte "Notas sobre los cables de control y de fuente de alimentación".*

❸ **A la entrada AMP REMOTE IN del amplificador de alimentación opcional**
Esta conexión es sólo para amplificadores. La conexión de cualquier otro sistema puede dañar la unidad.

❹ **Al terminal de alimentación de +12 V que recibe energía en la posición de accesorio del interruptor de la llave de encendido**

Notas
- *Si no hay posición de accesorio, conéctelo al terminal de alimentación (batería) de +12 V que recibe energía sin interrupción.*
  Asegúrese de conectar primero el cable de toma a tierra negro a una superficie metálica del automóvil.
- *Si el automóvil incorpora una antena de FM/AM en el cristal trasero/lateral, consulte "Notas sobre los cables de control y de fuente de alimentación".*

❺ **Al terminal de alimentación de +12 V que recibe energía sin interrupción**
Asegúrese de conectar primero el cable de toma a tierra negro a una superficie metálica del automóvil.

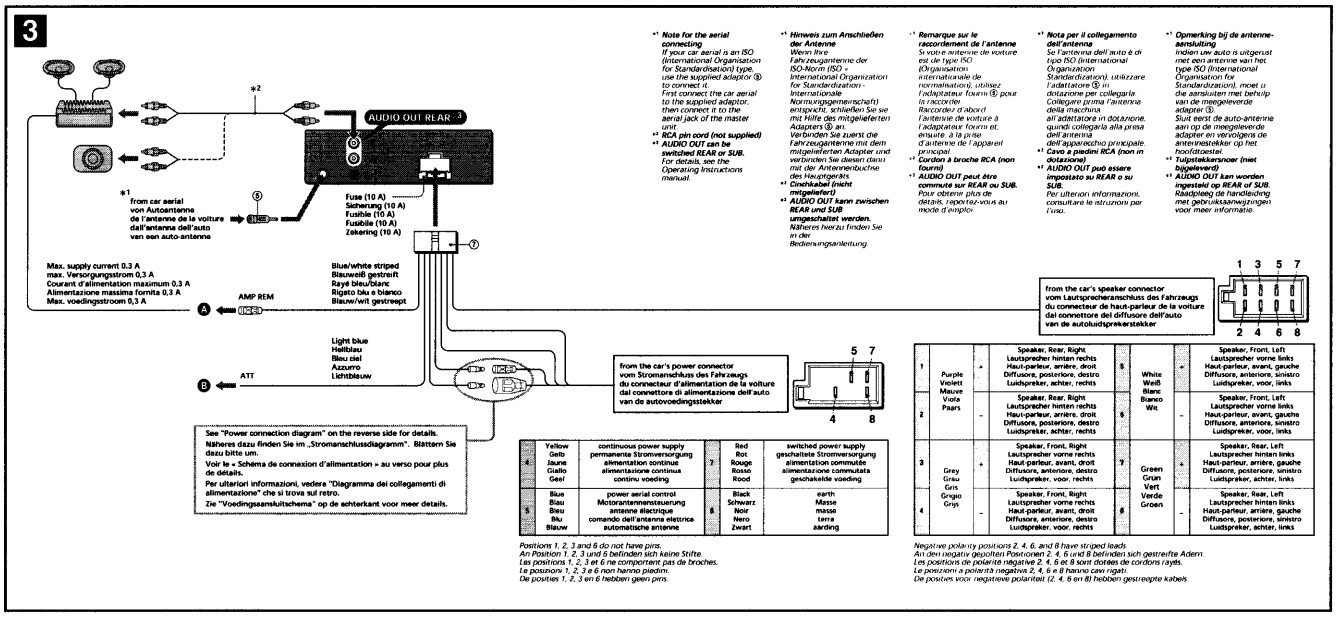
Notas sobre los cables de control y de fuente de alimentación
- *El cable de control de la antena motorizada (azul) suministrará cc de +12 V cuando encienda el sintonizador.*
- *Si el automóvil dispone de una antena de FM/AM incorporada en el cristal trasero o lateral, conecte el cable de control de antena motorizada (azul) o el cable de entrada de alimentación auxiliar (rojo) al terminal de alimentación del amplificador de antena existente. Para obtener más información, consulte a su proveedor.*
- *Con esta unidad no es posible utilizar una antena motorizada sin caja de relé.*

Conexión para protección de la memoria
Si conecta el conductor de entrada amarillo, el circuito de la memoria recibirá siempre alimentación, aunque ponga la llave de encendido en la posición OFF.

Notas sobre la conexión de los altavoces
- *Antes de conectar los altavoces, desconecte la unidad.*
- *Utilice altavoces con una impedancia de 4 a 8 ohmios con la capacidad de potencia adecuada para evitar que se dañen.*
- *No conecte los terminales de altavoz al chasis del automóvil, ni conecte los terminales del altavoz derecho con los del izquierdo.*
- *No conecte el cable de toma a tierra de esta unidad al terminal negativo (–) del altavoz.*
- *No intente conectar los altavoces en paralelo.*
- *Conecte solamente altavoces pasivos. Si conecta altavoces activos (con amplificadores incorporados) a los terminales de altavoz, puede dañar la unidad.*
- *Para evitar fallos de funcionamiento, no utilice los cables de altavoz incorporados instalados en el automóvil si su unidad comparte un cable negativo común (–) para los altavoces derecho e izquierdo.*
- *No conecte los cables de altavoz de la unidad entre sí.*

Nota sobre la conexión
Si el altavoz y el amplificador no están conectados correctamente, aparecerá "FAILURE" en la pantalla. Si es así, compruebe la conexión de ambos dispositivos.

CONNECTIONS (AEP, UK Model)


3
AUDIO OUT REAR
from car aerial
von Autoantenne
de l'antenne de la voiture
dall'antenna dell'auto
van een auto-antenne
Fuse (10 A)
Sicherung (10 A)
Fusible (10 A)
Fusibile (10 A)
Zekering (10 A)
Max. supply current 0,3 A
max. Versorgungsstrom 0,3 A
Courant d'alimentation maximum 0,3 A
Alimentazione massima fornita 0,3 A
Max. voedingsstroom 0,3 A
AMP REM
Blue/white striped
Blauweiß gestreift
Rayé bleu/blanc
Rigato blu e bianco
Blauw/wit gestreept
Light blue
Hellblau
Bleu ciel
Azzurro
Lichtblauw
ATT
See "Power connection diagram" on the reverse side for details.
Näheres dazu finden Sie im „Stromanschlussdiagramm". Blättern Sie dazu bitte um.
Voir le « Schéma de connexion d'alimentation » au verso pour plus de détails.
Per ulteriori informazioni, vedere "Diagramma dei collegamenti di alimentazione" che si trova sul retro.
Zie "Voedingsaansluitschema" op de achterkant voor meer details.
from the car's power connector
vom Stromanschluss des Fahrzeugs
du connecteur d'alimentation de la voiture
dal connettore di alimentazione dell'auto
van de autovoedingsstekker
from the car's speaker connector
vom Lautsprecheranschluss des Fahrzeugs
du connecteur de haut-parleur de la voiture
dal connettore del diffusore dell'auto
van de autoluidsprekerstekker

*1 **Note for the aerial connecting**
If your car aerial is an ISO (International Organisation for Standardisation) type, use the supplied adaptor ⑤ to connect it. First connect the car aerial to the supplied adaptor, then connect it to the aerial jack of the master unit.

*2 **RCA pin cord (not supplied)**

*3 **AUDIO OUT can be switched REAR or SUB.**
For details, see the Operating Instructions manual.

*1 **Hinweis zum Anschließen der Antenne**
Wenn Ihre Fahrzeugantenne der ISO-Norm (ISO = International Organization for Standardization - Internationale Normungsgemeinschaft) entspricht, schließen Sie sie mit Hilfe des mitgelieferten Adapters ⑤ an. Verbinden Sie zuerst die Fahrzeugantenne mit dem mitgelieferten Adapter und verbinden Sie diesen dann mit der Antennenbuchse des Hauptgeräts.

*2 **Cinchkabel (nicht mitgeliefert)**

*3 **AUDIO OUT kann zwischen REAR und SUB umgeschaltet werden.**
Näheres hierzu finden Sie in der Bedienungsanleitung.

*1 **Remarque sur le raccordement de l'antenne**
Si votre antenne de voiture est de type ISO (Organisation internationale de normalisation), utilisez l'adaptateur fourni ⑤ pour la raccorder. Raccorder d'abord l'antenne de voiture à l'adaptateur fourni et, ensuite, à la prise d'antenne de l'appareil principal.

*2 **Cordon à broche RCA (non fourni)**

*3 **AUDIO OUT peut être commuté sur REAR ou SUB.**
Pour obtenir plus de détails, reportez-vous au mode d'emploi.

*1 **Nota per il collegamento dell'antenna**
Se l'antenna dell'auto è di tipo ISO (International Organization for Standardization), utilizzare l'adattatore ⑤ in dotazione per collegarla. Collegare prima l'antenna della macchina all'adattatore in dotazione, quindi collegarla alla presa dell'antenna dell'apparecchio principale.

*2 **Cavo a piedini RCA (non in dotazione)**

*3 **AUDIO OUT può essere impostato su REAR o su SUB.**
Per ulteriori informazioni, consultare le istruzioni per l'uso.

*1 **Opmerking bij de antenne-aansluiting**
Indien uw auto is uitgerust met een antenne van het type ISO (International Organisation for Standardization), moet u die aansluiten met behulp van de meegeleverde adapter ⑤. Sluit eerst de auto-antenne aan op de meegeleverde adapter en vervolgens de antennestekker op het hoofdtoestel.

*2 **Tulpstekkersnoer (niet bijgeleverd)**

*3 **AUDIO OUT kan worden ingesteld op REAR of SUB.**
Raadpleeg de handleiding met gebruiksaanwijzingen voor meer informatie.

1	Purple Violett Mauve Viola Paars	+	Speaker, Rear, Right Lautsprecher hinten rechts Haut-parleur, arrière, droit Diffusore, posteriore, destro Luidspreker, achter, rechts	5	White Weiß Blanc Bianco Wit	+	Speaker, Front, Left Lautsprecher vorne links Haut-parleur, avant, gauche Diffusore, anteriore, sinistro Luidspreker, voor, links
2		−	Speaker, Rear, Right Lautsprecher hinten rechts Haut-parleur, arrière, droit Diffusore, posteriore, destro Luidspreker, achter, rechts	6		−	Speaker, Front, Left Lautsprecher vorne links Haut-parleur, avant, gauche Diffusore, anteriore, sinistro Luidspreker, voor, links
3	Grey Grau Gris Grigio Grijs	+	Speaker, Front, Right Lautsprecher vorne rechts Haut-parleur, avant, droit Diffusore, anteriore, destro Luidspreker, voor, rechts	7	Green Grün Vert Verde Groen	+	Speaker, Rear, Left Lautsprecher hinten links Haut-parleur, arrière, gauche Diffusore, posteriore, sinistro Luidspreker, achter, links
4		−	Speaker, Front, Right Lautsprecher vorne rechts Haut-parleur, avant, droit Diffusore, anteriore, destro Luidspreker, voor, rechts	8		−	Speaker, Rear, Left Lautsprecher hinten links Haut-parleur, arrière, gauche Diffusore, posteriore, sinistro Luidspreker, achter, links

A	Yellow Gelb Jaune Giallo Geel	continuous power supply permanente Stromversorgung alimentation continue alimentazione continua continu voeding	B	Red Rot Rouge Rosso Rood	switched power supply geschaltete Stromversorgung alimentation commutée alimentazione commutata geschakelde voeding
	Blue Blau Bleu Blu Blauw	power serial control Motorantennensteuerung antenne électrique comando dell'antenna elettrica automatische antenne		Black Schwarz Noir Nero Zwart	earth Masse masse terra aarding

Positions 1, 2, 3 and 6 do not have pins.
An Position 1, 2, 3 und 6 befinden sich keine Stifte.
Les positions 1, 2, 3 et 6 ne comportent pas de broches.
Le posizioni 1, 2, 3 e 6 non hanno piedini.
De posities 1, 2, 3 en 6 hebben geen pins.

Negative polarity positions 2, 4, 6, and 8 have striped leads.
An den negativ gepolten Positionen 2, 4, 6 und 8 befinden sich gestreifte Adern.
Les positions de polarité négative 2, 4, 6 et 8 sont dotées de cordons rayés.
Le posizioni a polarità negativa 2, 4, 6 e 8 hanno cavi rigati.
De posities voor negatieve polariteit (2, 4, 6 en 8) hebben gestreepte kabels.

Connection diagram (3)

Ⓐ **To AMP REMOTE IN of an optional power amplifier**
This connection is only for amplifiers. Connecting any other system may damage the unit.

Ⓑ **To the interface cable of a car telephone**

Warning
If you have a power aerial without a relay box, connecting this unit with the supplied power connecting lead ⑦ may damage the aerial.

Notes on the control leads
- *The power aerial control lead (blue) supplies +12 V DC when you turn on the tuner, or when you activate the AF (Alternative Frequency) or TA (Traffic Announcement) function.*
- *When your car has built-in FM/MW/LW aerial in the rear/side glass, connect the power aerial control lead (blue) or the accessory power input lead (red) to the power terminal of the existing aerial booster. For details, consult your dealer.*
- *A power aerial without a relay box cannot be used with this unit.*

Memory hold connection
When the yellow power input lead is connected, power will always be supplied to the memory circuit even when the ignition switch is turned off.

Notes on speaker connection
- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities to avoid its damage.*
- *Do not connect the speaker terminals to the car chassis, or connect the terminals of the right speakers with those of the left speaker.*
- *Do not connect the earth lead of this unit to the negative (–) terminal of the speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Connect only passive speakers. Connecting active speakers (with built-in amplifier) to the speaker terminals may damage the unit.*
- *To avoid a malfunction, do not use the built-in speaker leads installed in your car if the unit shares a common negative (–) lead for the right and left speakers.*
- *Do not connect the unit's speaker leads to each other.*

Note on connection
If speaker and amplifier are not connected correctly, "FAILURE" appears in the display. In this case, make sure the speaker and amplifier are connected correctly.

Anschlussdiagramm (3)

Ⓐ **An AMP REMOTE IN des gesondert erhältlichen Endverstärkers**
Dieser Anschluss ist ausschließlich für Verstärker gedacht. Schließen Sie nichts anderes daran an. Andernfalls kann das Gerät beschädigt werden.

Ⓑ **An Schnittstellenkabel eines Autotelefons**

Warnung
Wenn Sie eine Motorantenne ohne Relaiskästchen verwenden, kann durch Anschließen dieses Geräts mit dem mitgelieferten Stromversorgungskabel ⑦ die Antenne beschädigt werden.

Hinweise zu den Steuerleitungen
- *Die Motorantennen-Steuerleitung (blau) liefert + 12 V Gleichstrom, wenn Sie den Tuner einschalten oder die AF- (Alternativfrequenzsuche) oder die TA-Funktion (Verkehrsdurchsagen) aktivieren.*
- *Wenn das Fahrzeug mit einer in der Heck-/Seitenfensterscheibe integrierten FM (UKW)/MW/LW-Antenne ausgestattet ist, schließen Sie die Motorantennen-Steuerleitung (blau) oder die Zubehörstromversorgungsleitung (rot) an den Stromversorgungsanschluss des vorhandenen Antennenverstärkers an. Näheres dazu erfahren Sie bei Ihrem Händler.*
- *Es kann nur eine Motorantenne mit Relaiskästchen angeschlossen werden.*

Stromversorgung des Speichers
Wenn die gelbe Stromversorgungsleitung angeschlossen ist, wird der Speicher stets (auch bei ausgeschalteter Zündung) mit Strom versorgt.

Hinweise zum Lautsprecheranschluss
- *Schalten Sie das Gerät aus, bevor Sie die Lautsprecher anschließen.*
- *Verwenden Sie Lautsprecher mit einer Impedanz zwischen 4 und 8 Ohm und ausreichender Belastbarkeit. Ansonsten können die Lautsprecher beschädigt werden.*
- *Verbinden Sie die Lautsprecheranschlüsse nicht mit dem Wagenchassis und verbinden Sie auch nicht die Anschlüsse des rechten mit denen des linken Lautsprechers.*
- *Verbinden Sie die Masseleitung dieses Geräts nicht mit dem negativen (–) Lautsprecheranschluss.*
- *Versuchen Sie nicht, Lautsprecher parallel anzuschließen.*
- *An die Lautsprecheranschlüsse dieses Geräts dürfen nur Passivlautsprecher angeschlossen werden. Schließen Sie keine Aktivlautsprecher (Lautsprecher mit eingebauten Verstärkern) an, da das Gerät sonst beschädigt werden könnte.*
- *Um Fehlfunktionen zu vermeiden, verwenden Sie nicht die im Fahrzeug installierten, integrierten Lautsprecherleitungen, wenn am Ende eine gemeinsame negative (–) Leitung für den rechten und den linken Lautsprecher verwendet wird.*
- *Verbinden Sie nicht die Lautsprecherkabel des Geräts miteinander.*

Hinweis zum Anschließen
Wenn Lautsprecher und Verstärker nicht richtig angeschlossen sind, erscheint „FAILURE" im Display. Vergewissern Sie sich in diesem Fall, dass Lautsprecher und Verstärker richtig angeschlossen sind.

Schémas de connexion (3)

Ⓐ **Au niveau du AMP REMOTE IN d'un amplificateur de puissance facultatif**
Ce raccordement existe seulement pour les amplificateurs. Le raccordement à tout autre système peut endommager l'appareil.

Ⓑ **Vers le cordon de liaison d'un téléphone de voiture**

Avertissement
Si vous disposez d'une antenne électrique sans boîtier de relais, le branchement de cet appareil au moyen du cordon d'alimentation fourni ⑦ risque d'endommager l'antenne.

Remarques sur les fils de commande
- *Le fil de commande (bleu) fournit du courant continu de +12 V lorsque vous mettez le tuner sous tension ou lorsque vous activez la fonction AF (fréquence alternative) ou TA (informations circulation).*
- *Lorsque votre voiture est équipée d'une antenne FM/MW(PO)/LW(GO) intégrée dans la vitre arrière/latérale, raccorder le fil de commande de l'antenne (bleu) ou l'entrée d'alimentation des accessoires (rouge) au bornier de l'amplificateur d'antenne existant. Pour plus de détails, consultez votre revendeur.*
- *Une antenne électrique sans boîtier de relais ne peut pas être utilisée avec cet appareil.*

Connexion pour la conservation de la mémoire
Lorsque le fil d'entrée d'alimentation jaune est connecté, le circuit de la mémoire est alimenté en permanence même si la clé de contact est en position d'arrêt.

Remarques sur la connexion des haut-parleurs
- *Avant de raccorder les haut-parleurs, mettre l'appareil hors tension.*
- *Utiliser des haut-parleurs ayant une impédance de 4 à 8 ohms et une capacité adéquate sous peine de les endommager.*
- *Ne pas raccorder les bornes du système de haut-parleurs au châssis de la voiture et ne pas connecter les bornes du haut-parleur droit à celles du haut-parleur gauche.*
- *Ne pas raccorder le câble de masse de cet appareil à la borne négative (–) du haut-parleur.*
- *Ne pas tenter de raccorder les haut-parleurs en parallèle.*
- *Ne pas connecter d'enceintes acoustiques actives (avec amplificateurs intégrés) aux bornes d'enceinte de cet appareil, pour éviter d'endommager l'appareil. Veiller à raccorder des enceintes passives uniquement.*
- *Pour éviter tout dysfonctionnement, n'utilisez pas les fils des haut parleurs intégrés installés dans votre voiture si l'appareil dispose d'un fil négatif commun (–) pour les haut-parleurs droit et gauche.*
- *Ne raccordez pas entre eux les cordons des haut-parleurs de l'appareil.*

Remarque sur le raccordement
Si les enceintes et l'amplificateur ne sont pas raccordés correctement, le message « FAILURE » s'affiche. Dans ce cas, assurez vous que les enceintes et l'amplificateur sont raccordés correctement.

Schema di collegamento (3)

Ⓐ **A AMP REMOTE IN di un amplificatore di potenza opzionale**
Questo collegamento è riservato esclusivamente agli amplificatori. Non collegare un tipo di sistema diverso onde evitare di causare danni all'apparecchio.

Ⓑ **Al cavo interfaccia di un telefono per auto**

Avvertenza
Quando si collega l'apparecchio con il cavo di alimentazione in dotazione ⑦, si potrebbe danneggiare l'antenna elettrica se questa non ha la scatola di relè.

Note sul cavi di controllo
- *Il cavo (blu) di controllo dell'antenna elettrica fornisce alimentazione pari a +12 V CC quando si attiva il sintonizzatore oppure la funzione TA (notiziario sul traffico) o AF (frequenza alternativa).*
- *Se l'autovettura è dotata di antenna FM/MW/LW incorporata nel vetro posteriore/laterale, collegare il cavo (blu) di controllo dell'antenna elettrica o il cavo (rosso) di ingresso dell'alimentazione accessoria al terminale di alimentazione del preamplificatore dell'antenna esistente. Per ulteriori informazioni, consultare il proprio fornitore.*
- *Non è possibile usare un'antenna elettrica senza scatola a relè con questo apparecchio.*

Collegamento per la conservazione della memoria
Quando il cavo di ingresso alimentazione giallo è collegato, viene sempre fornita alimentazione al circuito di memoria anche quando l'interruttore di accensione è spento.

Note sul collegamento dei diffusori
- *Prima di collegare i diffusori spegnere l'apparecchio.*
- *Usare diffusori di impedenza compresa tra 4 e 8 ohm e con capacità di potenza adeguata, altrimenti i diffusori potrebbero venir danneggiati.*
- *Non collegare i terminali del sistema diffusori al telaio dell'auto e non collegare i terminali del diffusore destro a quelli del diffusore sinistro.*
- *Non collegare il cavo di terra di questo apparecchio al terminale negativo (–) del diffusore.*
- *Non collegare i diffusori in parallelo.*
- *Assicurarsi di collegare soltanto diffusori passivi, poiché il collegamento di diffusori attivi, dotati di amplificatori incorporati, ai terminali dei diffusori potrebbe danneggiare l'apparecchio.*
- *Per evitare problemi di funzionamento, non utilizzare i cavi dei diffusori incorporati installati nell'autovettura se l'apparecchio condivide un cavo comune negativo (–) per i diffusori destro e sinistro.*
- *Non collegare fra loro i cavi dei diffusori dell'apparecchio.*

Nota sul collegamenti
Se l'amplificatore e il diffusore non sono collegati correttamente, "FAILURE" viene visualizzato nel display. In tal caso, accertarsi che l'amplificatore e il diffusore siano collegati correttamente.

Aansluitschema (3)

Ⓐ **Naar AMP REMOTE IN van een los verkrijgbare vermogensversterker**
Deze aansluiting is alleen bedoeld voor versterkers. Door een ander systeem aan te sluiten kan het toestel worden beschadigd.

Ⓑ **Naar het interface-snoer van een autotelefoon**

Opgelet
Indien u een elektrische antenne heeft zonder relaiskast, kan het aansluiten van deze eenheid met het bijgeleverde netsnoer ⑦ de antenne beschadigen.

Opmerkingen betreffende de aansluitsnoeren
- *De antenneregelingskabel (blauw) levert +12 V gelijkstroom wanneer u de tuner inschakelt of de AF (Alternative Frequency) of TA (Traffic Announcement) functie activeert.*
- *Wanneer uw auto is uitgerust met een FM/MW/LW-antenne in de achterruit/zijvenster, moet u de antenneregelingskabel (blauw) of de hulpvoedingskabel (rood) aansluiten op de voedingsingang van de bestaande antenneversterker. Raadpleeg uw dealer voor meer details.*
- *Met dit apparaat is het niet mogelijk een automatische antenne zonder relaishuis te gebruiken.*

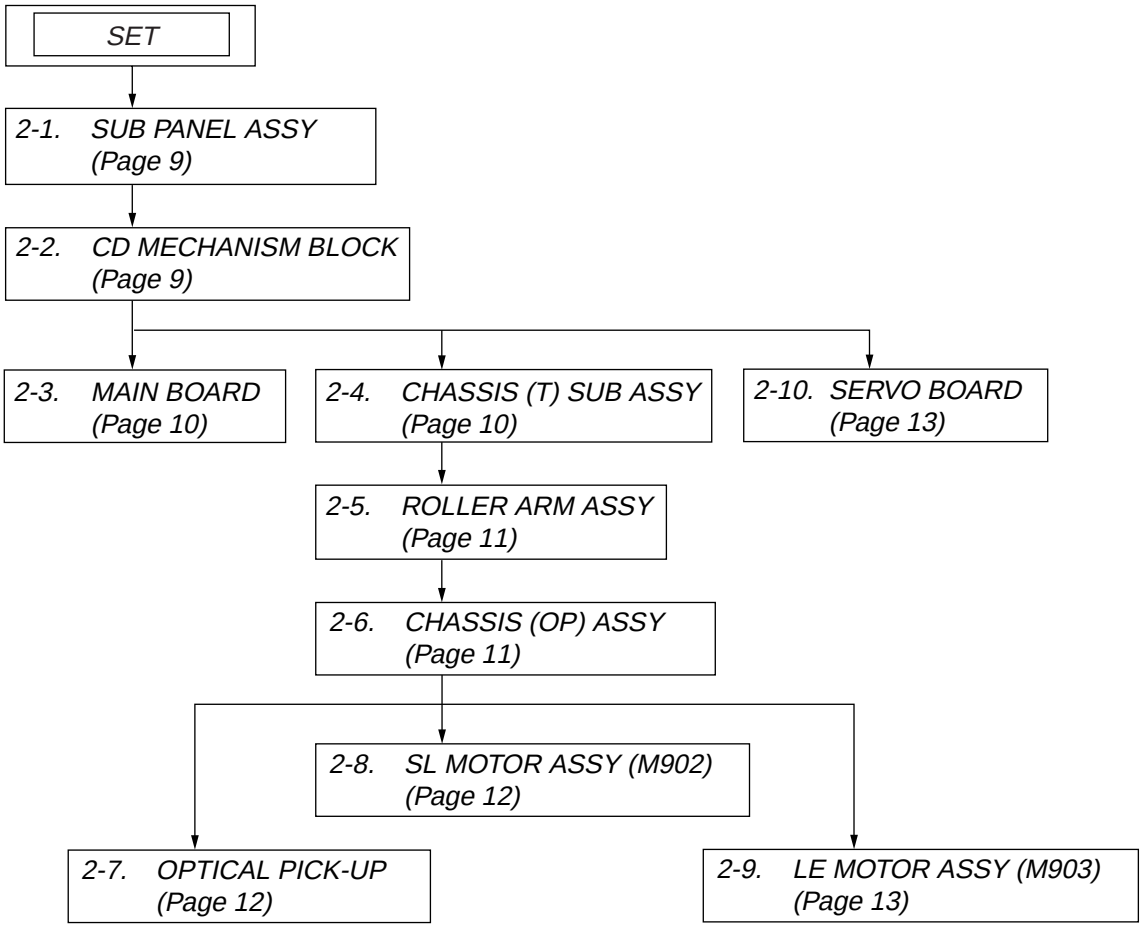
Instandhouden van het geheugen
Zolang de gele stroomdraad is aangesloten, blijft de stroomvoorziening van het geheugen intact, ook wanneer het contact van de auto wordt uitgeschakeld.

Opmerkingen betreffende het aansluiten van de luidsprekers
- *Zorg dat het apparaat is uitgeschakeld, alvorens de luidsprekers aan te sluiten.*
- *Gebruik luidsprekers met een impedantie van 4 tot 8 Ohm en let op dat die het vermogen van de versterker kunnen verwerken. Als dit wordt verzuimd, kunnen de luidsprekers ernstig beschadigd raken.*
- *Verbind in geen geval de aansluitingen van de luidsprekers met het chassis van de auto en sluit de aansluitingen van de rechter en linker luidspreker niet op elkaar aan.*
- *Verbind de massakabel van dit toestel niet met de negatieve (–) aansluiting van de luidspreker.*
- *Probeer nooit de luidsprekers parallel aan te sluiten.*
- *Sluit geen actieve luidsprekers (met ingebouwde versterker) aan op de luidspreker-aansluiting van dit apparaat. Dit zal leiden tot beschadiging van de actieve luidsprekers. Sluit dus altijd uitsluitend luidsprekers zonder ingebouwde versterker aan.*
- *Om defecten te vermijden mag u de bestaande luidsprekerbedrading in uw auto niet gebruiken wanneer er een gemeenschappelijke negatieve (–) draad is voor de rechter en linker luidsprekers.*
- *Verbind de luidsprekerkabels van dit toestel niet met elkaar.*

Opmerking over aansluiten
Als de luidsprekers en versterker niet correct zijn aangesloten, wordt "FAILURE" in het display weergegeven. In dit geval moet u zorgen dat de luidsprekers en versterker correct zijn aangesloten.

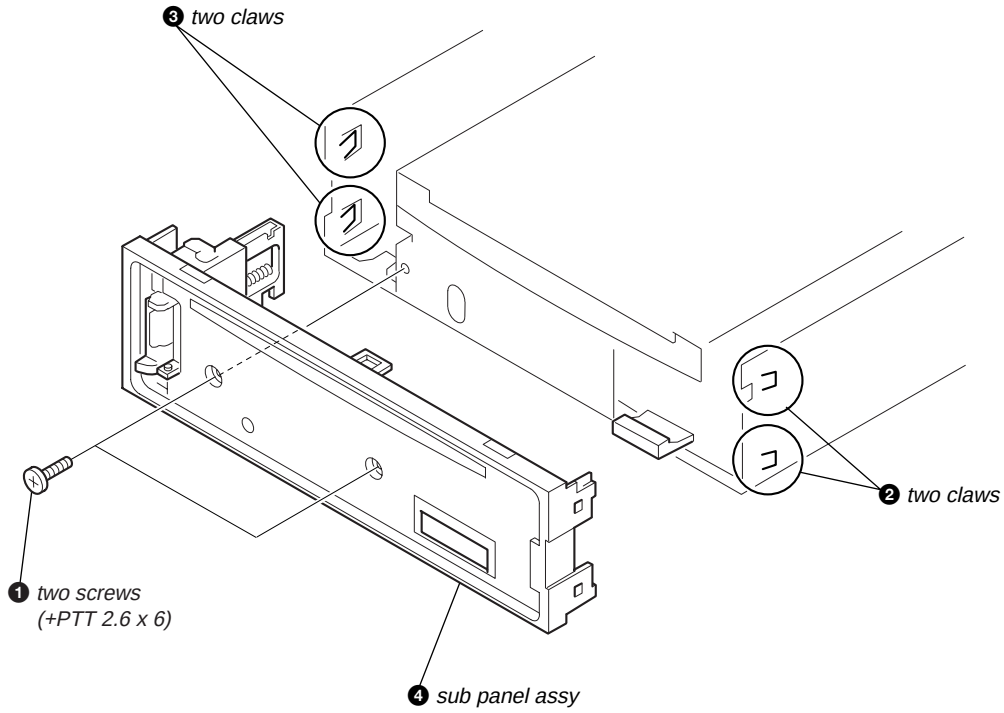
SECTION 2
DISASSEMBLY

Note : This set can be disassemble according to the following sequence.

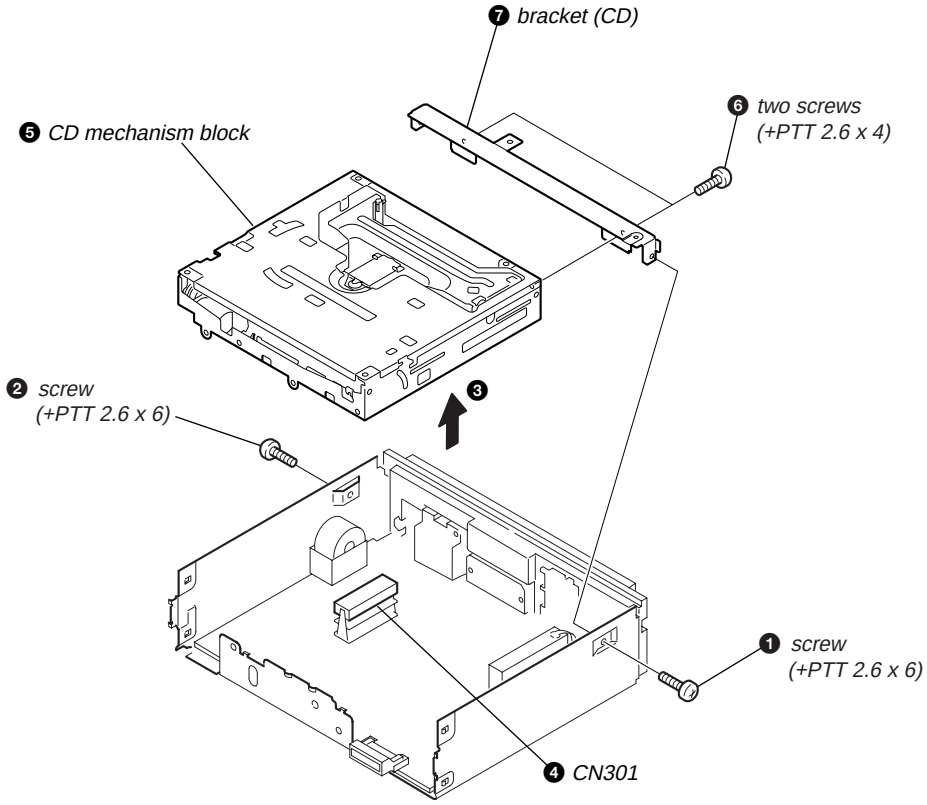

SET
2-1. SUB PANEL ASSY (Page 9)
2-2. CD MECHANISM BLOCK (Page 9)
2-3. MAIN BOARD (Page 10)
2-4. CHASSIS (T) SUB ASSY (Page 10)
2-10. SERVO BOARD (Page 13)
2-5. ROLLER ARM ASSY (Page 11)
2-6. CHASSIS (OP) ASSY (Page 11)
2-8. SL MOTOR ASSY (M902) (Page 12)
2-7. OPTICAL PICK-UP (Page 12)
2-9. LE MOTOR ASSY (M903) (Page 13)

Note : Follow the disassembly procedure in the numerical order given.

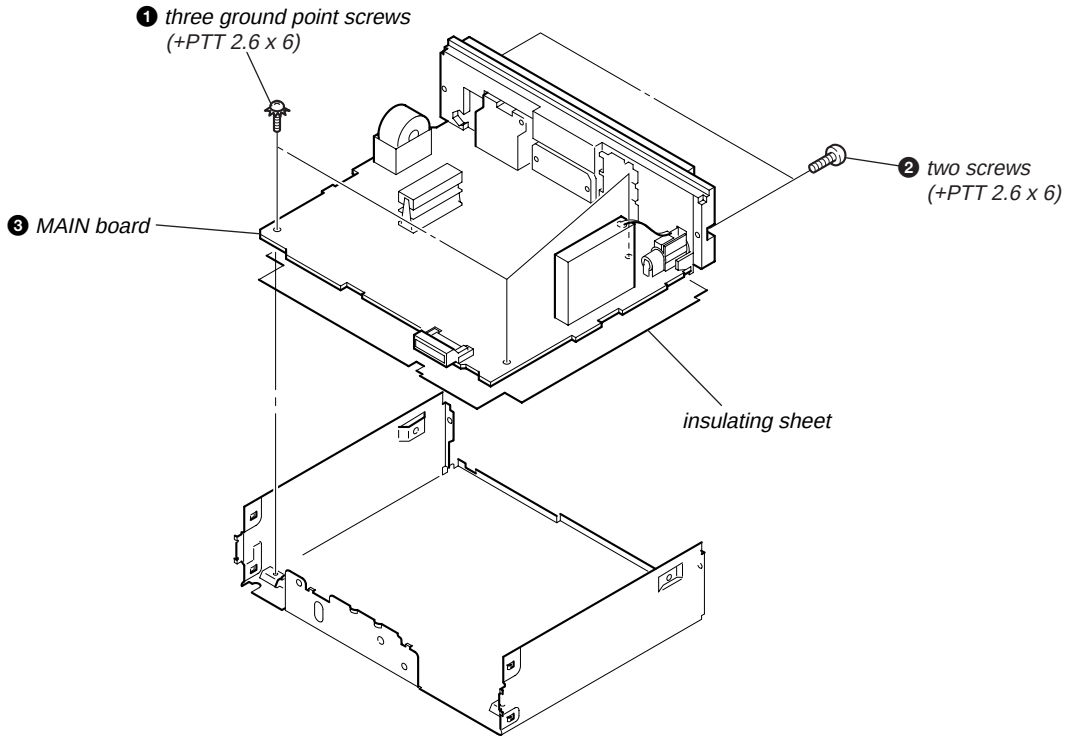
2-1. SUB PANEL ASSY



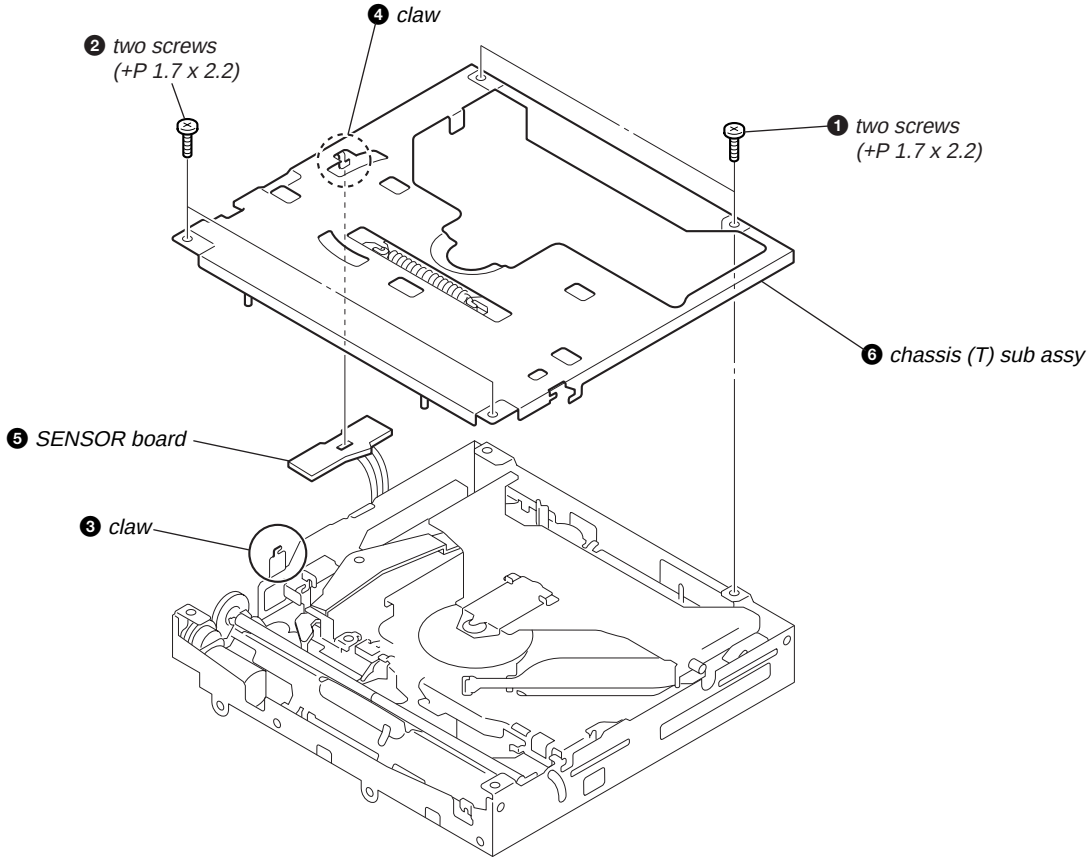
2-2. CD MECHANISM BLOCK



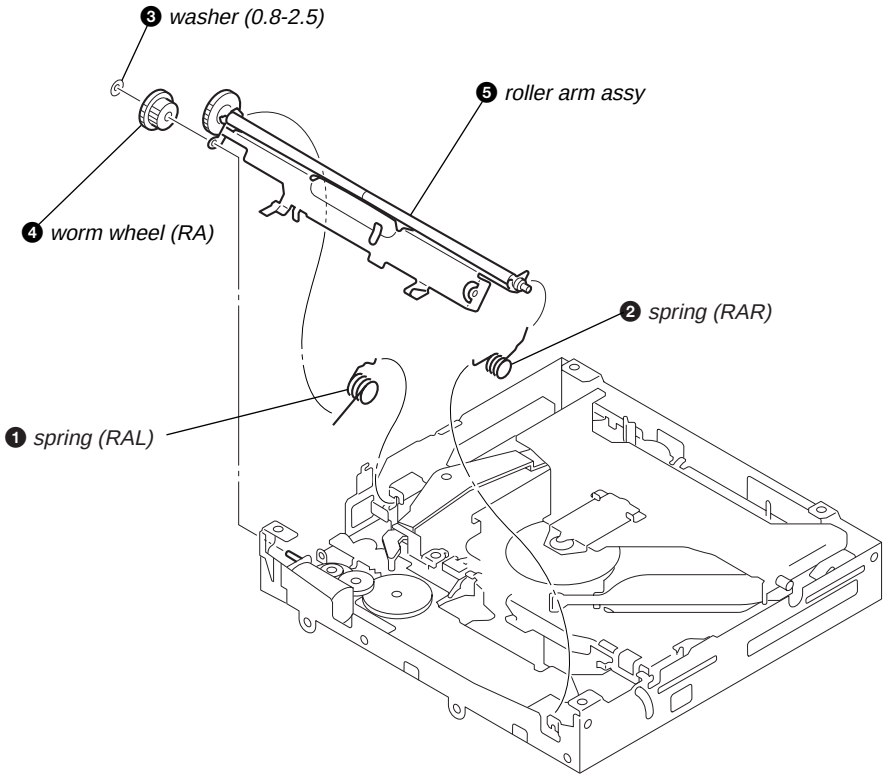
2-3. MAIN BOARD



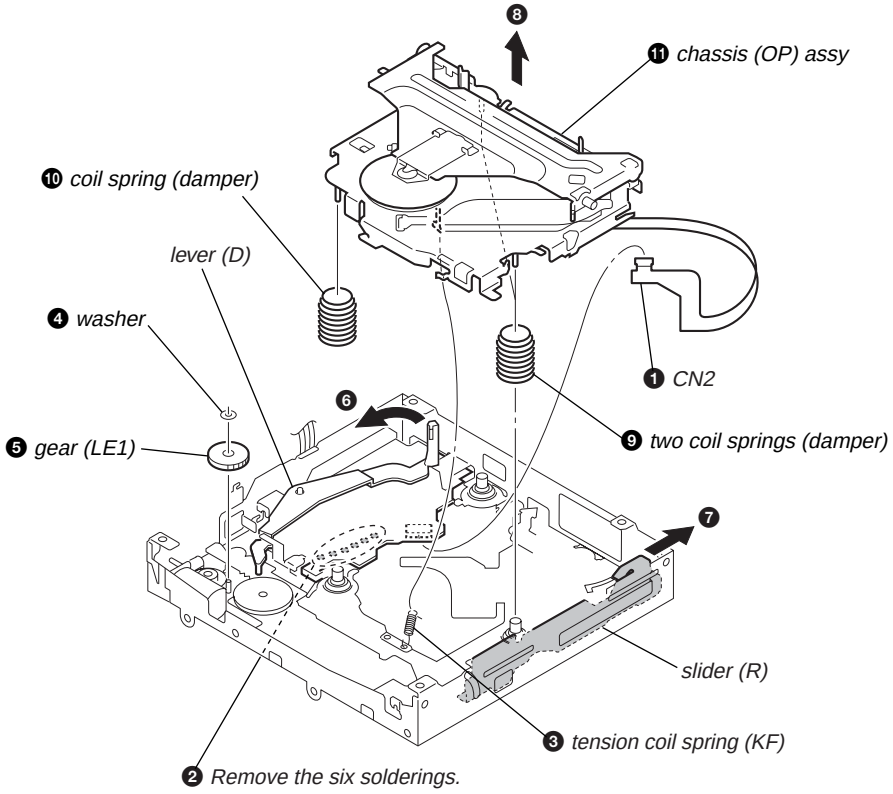
2-4. CHASSIS (T) SUB ASSY



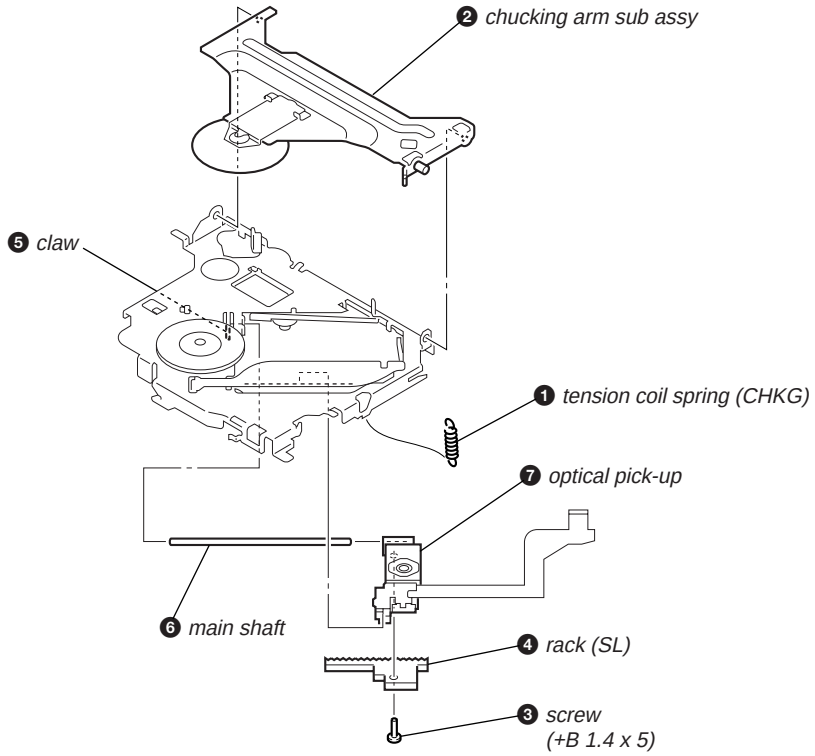
2-5. ROLLER ARM ASSY



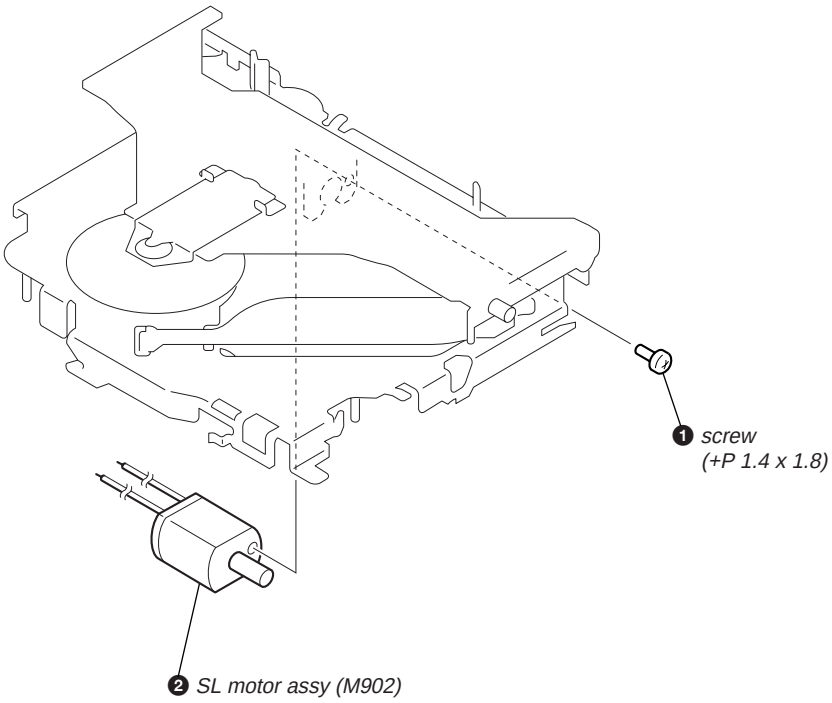
2-6. CHASSIS (OP) ASSY



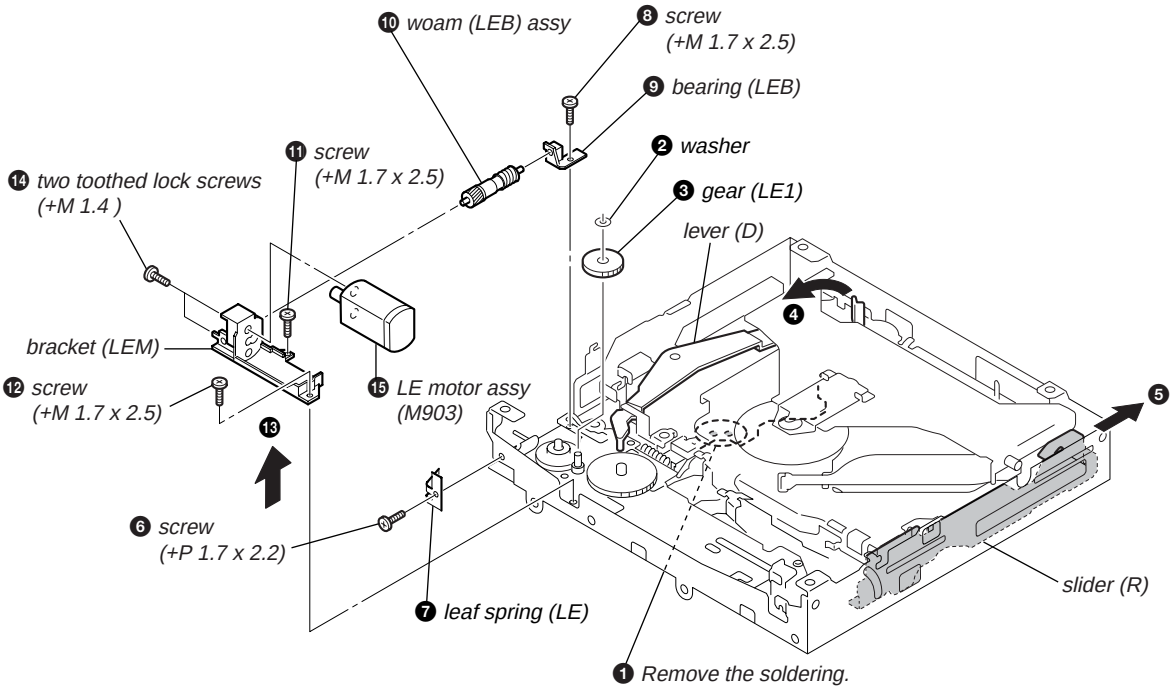
2-7. OPTICAL PICK-UP



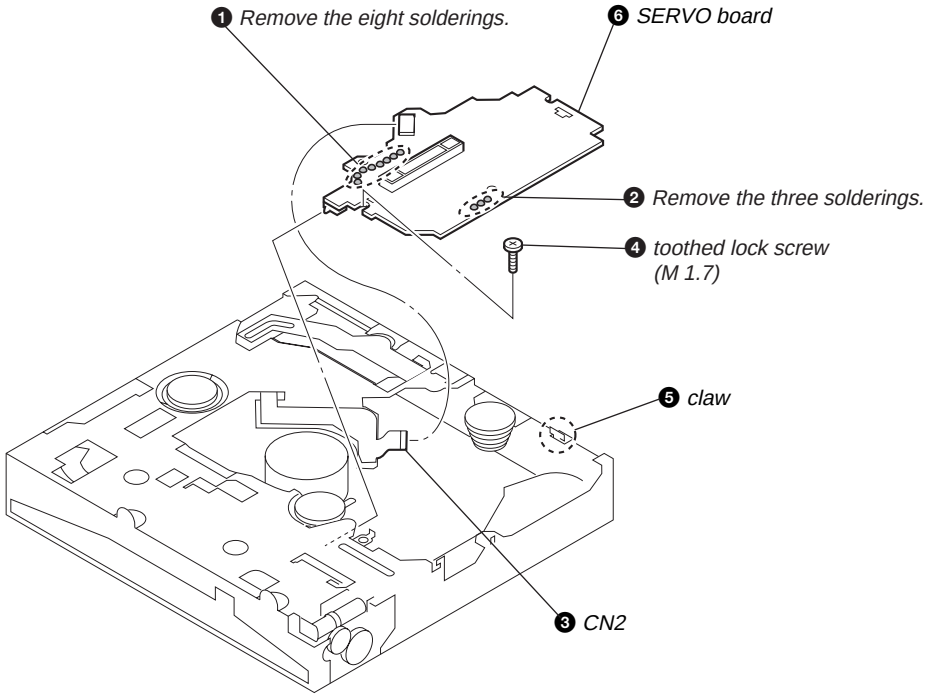
2-8. SL MOTOR ASSY (M902)



2-9. LE MOTOR ASSY (M903)



2-10. SERVO BOARD



SECTION 3
DIAGRAMS

3-1. IC PIN DESCRIPTIONS

• IC1 µPD63712GC-8EU-A (RF AMP, DIGITAL SERVO, DIGITAL SIGNAL PROCESSOR) (SERVO BOARD)

Pin No.	Pin Name	I/O	Pin Description
1	LD	O	Laser diode ON/OFF control signal output (L: laser OFF, H: laser ON)
2	PD	I	Dimmer monitor input from optical pick-up laser diode.
3	PN	I	Not used. (Fixed at L in this set)
4	AVDD	—	Analog power supply pin (+3.3 V)
5	DGND	—	Ground
6	RFOK	O	RFOK signal output to system control IC.
7	INTQ	O	CD text pack synchronization signal output to system control IC.
8	RST	I	CD reset signal input from system control IC.
9	A0	I	Command/parameter discrimination signal input from system control IC. (L: command transmission, H: parameter transmission)
10	STB	I	Data strobe signal input from system control IC.
11	SCK	I	Serial clock input from system control IC.
12	SO	O	Serial data output to system control IC.
13	SI	I	Serial data input from system control IC.
14	DVDD	—	Power supply pin (+3.3 V)
15	DAVDD	—	D/A converter power supply (+) pin (+3.3 V)
16	ROUT	O	Analog audio signal output (R-ch)
17	DAGND	—	Ground
18	REGC	—	Capacitor connection pin for SCF regulator.
19	DAGND	—	Ground
20	LOUT	O	Analog audio signal output (L-ch)
21	DAVDD	—	D/A converter power supply (+) pin (+3.3 V)
22	XVDD	—	Power supply pin (+3.3 V)
23	XTAL	O	Main system clock output (16.9344 MHz)
24	XTAL	I	Main system clock input (16.9344 MHz)
25	XGND	—	Ground
26	DVDD	—	Power supply pin (+3.3 V)
27	C1D1/FZD	O	Not used. (Open)
28	C1D2/TZD	O	Not used. (Open)
29	C2D1/RMUTE	O	CD R-ch data zero detection signal output
30	C2D2/LMUTE	O	CD L-ch data zero detection signal output
31	C2D3/SHOCK/SBSY	O	Not used. (Open)
32	LOCK/FR	O	Not used. (Open)
33	WFCK/MIRR	O	Not used. (Open)
34	RFCK/HOLD	O	Not used. (Open)
35	PLCK	O	Not used. (Open)
36	C16M	O	Not used. (Open)
37	DGND	—	Ground
38	TX	O	Not used. (Open)
39	EMPH/RAMOVER	O	Not used. (Open)
40	FLAG	O	Not used. (Open)
41	DVDD	—	Power supply pin (+3.3 V)
42	LIMIT	I	Not used. (Fixed at L in this set)
43	XTALEN	I	Oscillation circuit ON/OFF control signal input (L: ON, H: OFF) (Fixed at L in this set)
44	DGND	—	Ground
45	DIN	I	Not used. (Connect to DOUT in this set)
46	DOUT	O	Not used. (Connect to DIN in this set)
47	SCKIN	I	Not used. (Connect to SCKO in this set)
48	SCKO	O	Not used. (Connect to SCKIN in this set)
49	LRCKIN	I	Not used. (Connect to LRCK in this set)

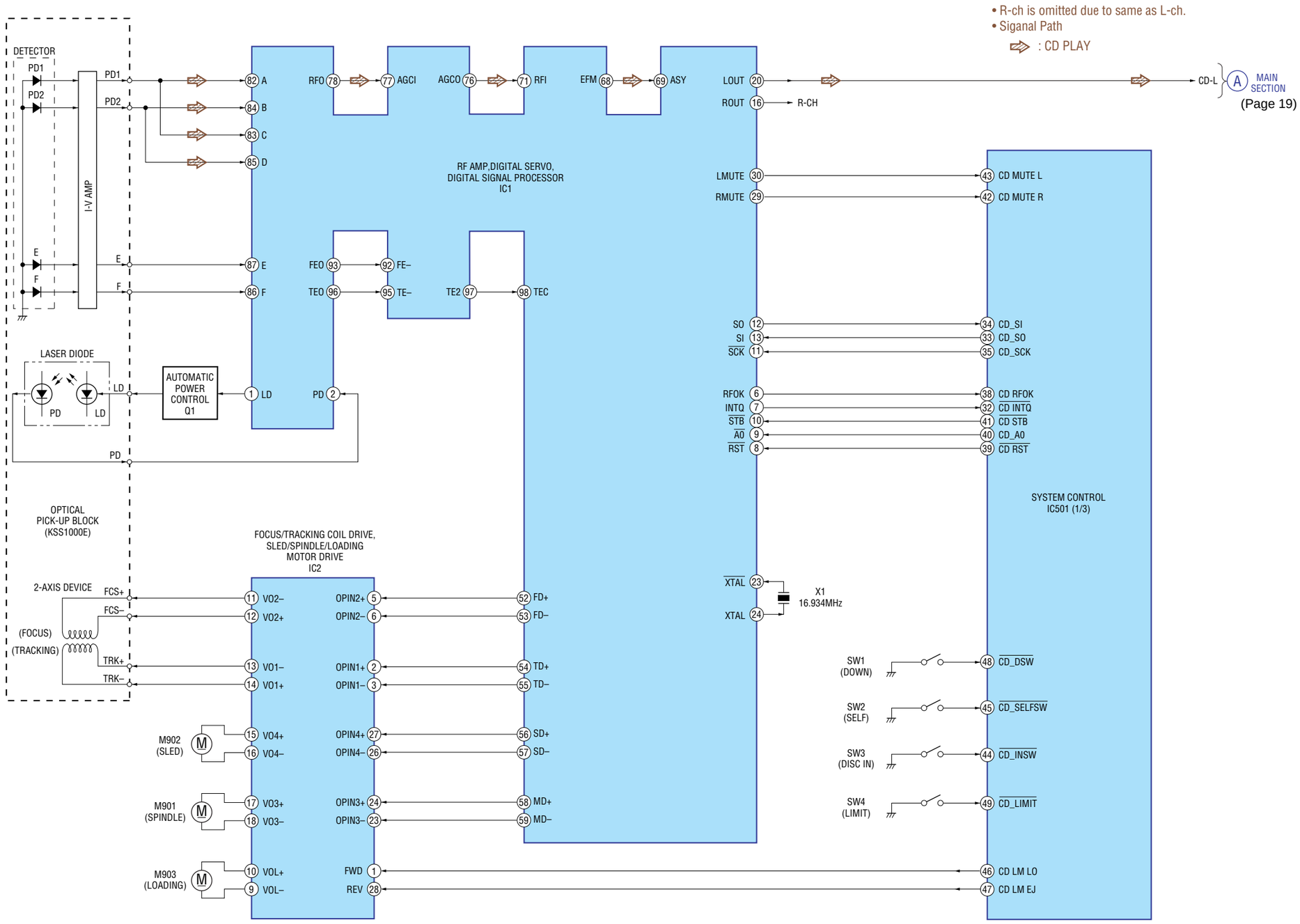
Pin No.	Pin Name	I/O	Pin Description
50	LRCK	O	Not used. (Connect to LRCKIN in this set)
51	DVDD	—	Power supply pin (+3.3 V)
52	FD+	O	Focus servo drive PWM signal output (+)
53	FD–	O	Focus servo drive PWM signal output (–)
54	TD+	O	Tracking servo drive PWM signal output (+)
55	TD–	O	Tracking servo drive PWM signal output (–)
56	SD+	O	Sled servo drive PWM signal output (+)
57	SD–	O	Sled servo drive PWM signal output (–)
58	MD+	O	Spindle servo drive PWM signal output (+)
59	MD–	O	Spindle servo drive PWM signal output (–)
60	DGND	—	Ground
61	TESTEN	I	Test setting input (Fixed at L in this set)
62 to 66	TEST4 to TEST0	I	Test setting input (Fixed at L in this set)
67	ADGND	—	A/D converter power supply (–) pin
68	EFM	O	EFM signal output
69	ASY	I	EFM comparator reference voltage input
70	ADVDD	—	A/D converter power supply pin (+3.3 V)
71	RFI	I	RF signal input for EFM data growing.
72	EQ2	—	Not used. (Open)
73	EQ1	—	RF amplifier equalizer parts connection pin
74	RF–	I	Not used. (Open)
75	RF2–	I	RF amplifier inversion input
76	AGCO	O	RF signal output after on AGC.
77	AGCI	I	RF AGC signal amplifier input
78	RFO	O	RF signal output before on AGC.
79	ATEST	I	Not used. (Open)
80	C3T	—	Capacitor connection pin for 3T detection.
81	AGND	—	Ground
82	A	I	Signal input (A) from optical pick-up detector.
83	C	I	Signal input (C) from optical pick-up detector.
84	B	I	Signal input (B) from optical pick-up detector.
85	D	I	Signal input (D) from optical pick-up detector.
86	F	I	Signal input (F) from optical pick-up detector.
87	E	I	Signal input (E) from optical pick-up detector.
88	VREFIN	I	Reference voltage (+1.65 V) input
89	AVDD	—	Analog power supply pin (+3.3 V)
90	REFOUT	O	Reference voltage (+1.65 V) output
91	REFC	—	Capacitor connection pin for reference voltage output.
92	FE–	I	Focus error signal amplifier inversion input
93	FEO	O	Focus error signal amplifier output
94	ADCIN	I	Not used. (Open)
95	TE-	I	Tracking error signal amplifier inversion input
96	TEO	O	Tracking error signal amplifier before output
97	TE2	O	Tracking error signal amplifier after output
98	TEC	I	Tracking error signal comparator input
99	AGND	—	Ground
100	PWMSW	I	Not used. (Fixed at L in this set)

• IC501 MN101E01KAB (SYSTEM CONTROL) (MAIN BOARD (1/2))

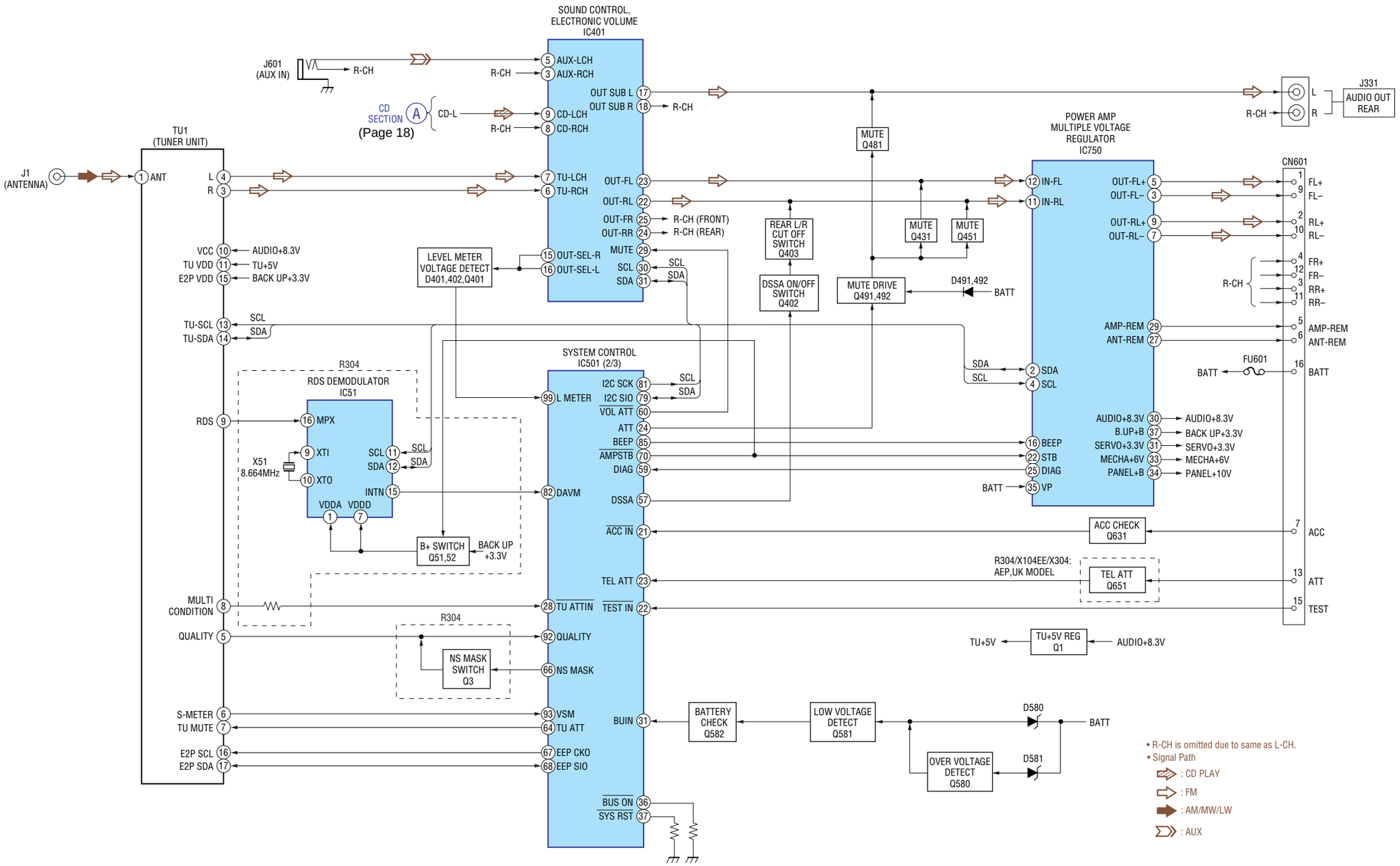
Pin No.	Pin Name	I/O	Pin Description
1	DAVDD	—	Power supply pin for D/A output converter (+3.3 V)
2	BBE-MP	O	Not used in this set. (Open)
3	DAVSS	—	Ground pin for D/A output converter
4 to 6	NCO	O	Not used in this set. (Open)
7	UNISO	O	SONY-BUS data signal output Not used in this set. (Open)
8	UNISI	I	SONY-BUS data signal input Not used in this set.
9	UNICKO	O	SONY-BUS clock signal output Not used in this set.
10	VDD1	—	Power supply pin for internal core (+3.3 V)
11	MMOD	I	Flash microcomputer write detection signal input Not used in this set.
12	OSCOUT	O	High speed operation clock signal output (27 MHz)
13	OSCIN	I	High speed operation clock signal input (27 MHz)
14	VSS1	—	Ground pin for internal core
15	XIN	I	Low speed operation clock signal input (32.768 kHz)
16	XOUT	O	Low speed operation clock signal output (32.768 kHz)
17	VDD2	—	Power supply pin for internal core (+3.3 V)
18	MOD1	—	Pull up: “H”
19	$\overline{\text{RESET}}$	I	Reset signal input
20	NCO	O	Not used in this set. (Open)
21	$\overline{\text{ACC IN}}$	I	Accessory power supply detection signal input
22	$\overline{\text{TEST IN}}$	I	Test mode detection signal input
23	TEL ATT	I	Telephone attenuate detection signal input
24	ATT	O	Audio mute control signal output
25	$\overline{\text{XKEYON}}$	O	Key power supply control signal output Not used in this set. (Open)
26	NCO	O	Not used in this set. (Open)
27	$\overline{\text{KEYACK}}$	I	Key acknowledge detection signal input
28	$\overline{\text{TU ATTIN}}$	I	Tuner mute ZERO cross detection signal input
29, 30	NCO	O	Not used in this set. (Open)
31	BUIN	I	Back up power supply detection signal input
32	$\overline{\text{CD INTQ}}$	I	CD servo IC CD text pack synchronization signal input
33	CD SO	O	CD servo IC serial data signal output (for command/text)
34	CD SI	I	CD servo IC serial data signal input (for command/text)
35	CD SCK	O	CD servo IC serial clock signal output (for command/text)
36	$\overline{\text{BUSON}}$	O	BUS on signal output
37	$\overline{\text{SYSRST}}$	O	System reset signal output
38	CD RFOK	I	CD servo IC RFOK signal input
39	$\overline{\text{CD RST}}$	O	CD servo IC reset signal output
40	CD A0	O	CD servo IC command/parameter identification signal output Command transmission: “L”, Parameter transmission: “H”
41	CD STB	O	CD servo IC data strob signal output
42	CD MUTE R	I	Mechadeck mute zero cross detection signal input R
43	CD MUTE L	I	Mechadeck mute zero cross detection signal input L
44	$\overline{\text{CD INSW}}$	I	CD mecha disc in switch detection signal input
45	$\overline{\text{CD SELFSW}}$	I	CD mecha self load position detection switch signal input
46	CD LM LO	O	CD mecha loading motor control signal output
47	CD LM EJ	O	CD mecha eject motor control signal output
48	$\overline{\text{CD DSW}}$	I	CD mecha down switch detection signal input
49	$\overline{\text{CD LIMIT}}$	I	CD mecha in-limit switch signal input
50	NCO	O	Not used in this set. (Open)
51	AREASEL1	I	Destination function setting input 1
52	AREASEL2	I	Destination function setting input 2
53	AREASEL3	I	Destination function setting input 3

Pin No.	Pin Name	I/O	Pin Description
54	LCD CTL	O	“H” output: LCD unit and key confusion, power off “L” output: LCD unit and key confusion, power on
55, 56	NCO	O	Not used in this set. (Open)
57	DSSA	O	DSSA on/off change signal output (Cut off rear)
58	$\overline{\text{PANEL SW}}$	I	Front panel attachment detection signal input “L”: with panel, “H”: without panel
59	DIAG	I	Condition signal input from the power IC
60	$\overline{\text{VOLATT}}$	O	Electronic volume attenuate control signal output
61, 62	NCO	O	Not used in this set. (Open)
63	VSS2	—	Ground pin for I/O port
64	TU ATT	O	Tuner mute control signal output
65	NCO	O	Not used in this set. (Open)
66	NS MASK	O	Noise mask signal output
67	EEP CKO	O	Serial clock signal output for EEPROM communication
68	EEP SIO	I/O	Serial data signal input/output for EEPROM communication
69	NCO	O	Not used in this set. (Open)
70	$\overline{\text{AMPSTB}}$	O	Power regulator IC standby signal output
71 to 73	NCO	O	Not used in this set. (Open)
74	NCO	O	Not used in this set. (Open)
75	COL SEL	I	“H”: Front panel illumination green (Initial value) “L”: Front panel illumination amber (Initial value)
76	LCDSO	O	Serial data signal output to the LCD driver
77	LCDCE	O	Chip enable signal output to the LCD driver
78	LCDCKO	O	Serial clock signal output to the LCD driver
79	I2C SIO	I/O	I2C BUS serial data signal input/output
80	NCO	O	Not used in this set. (Open)
81	I2C CKO	O	I2C BUS serial clock signal output
82	DAVN	I	RDS data block synchronization detection signal input
83	SIRCS	I	Remote control signal input
84	NCO	O	Not used in this set. (Open)
85	BEEP	O	Beep signal output to the power amp
86 to 88	NCO	O	Not used in this set. (Open)
89	VDD3	—	Power supply pin for I/O port (+3.3 V)
90	COL SW	I	“L” input: two color change/initial slave color: amber “H” input: one color/slave color: white
91	VSS3	—	Ground pin for I/O port
92	QUALITY	I	Noise detection signal input
93	VSM	I	S meter voltage detection signal input
94	KEYIN1	I	Key signal input 1
95	KEYIN0	I	Key signal input 0
96	NCO	O	Not used in this set.
97	KEYIN2	I	Key signal input (EJECT, OFF, SOURCE switch)
98	RE	I	Rotary encoder signal input
99	L METER	I	Level meter voltage detection signal input
100	VREF+	—	Power supply pin for A/D input converter

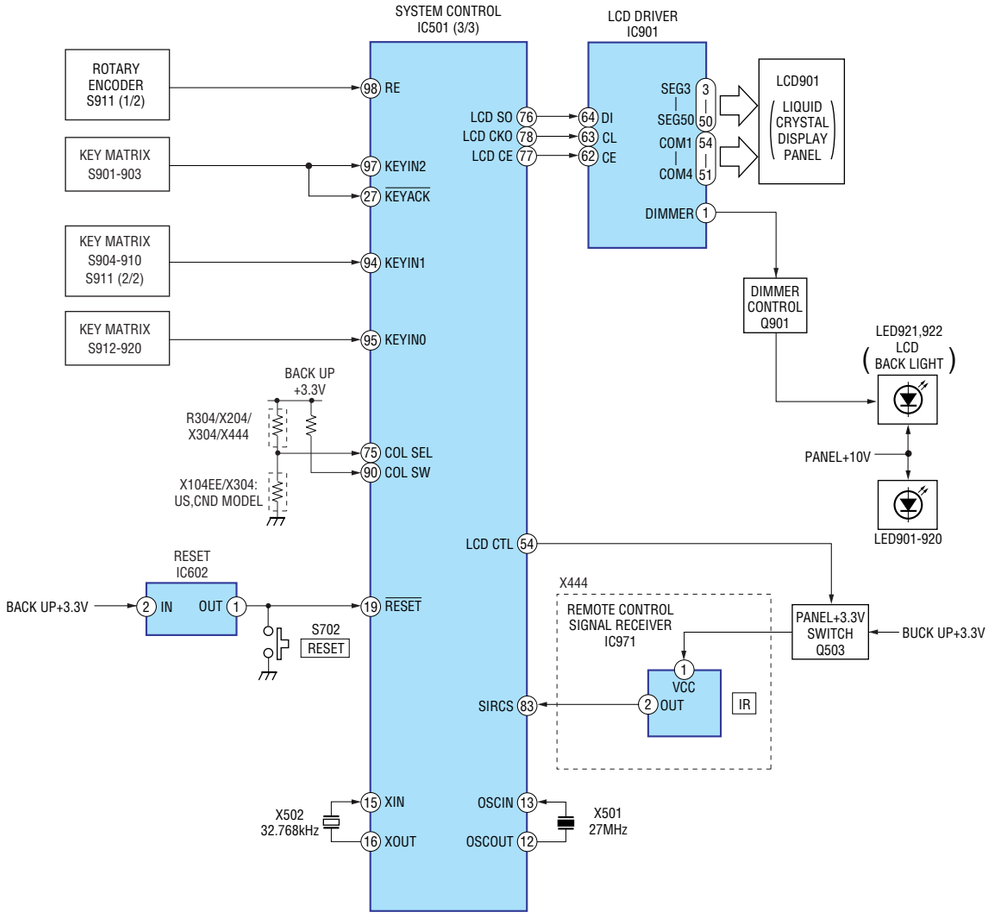
3-2. BLOCK DIAGRAM — CD SECTION —



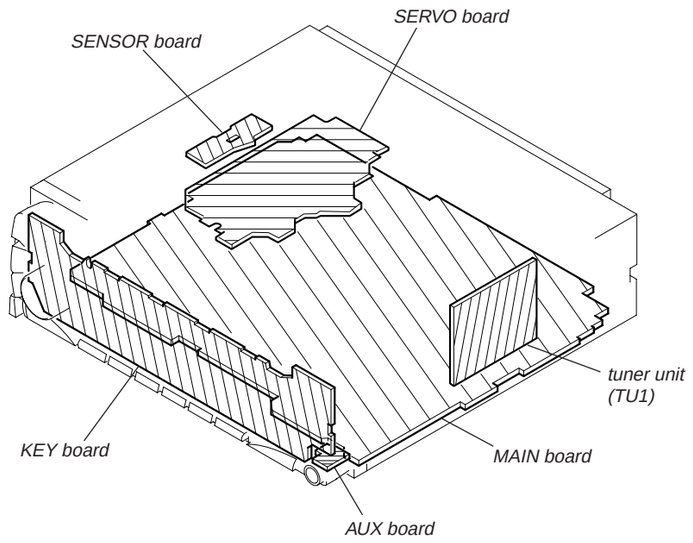
3-3. BLOCK DIAGRAM — MAIN SECTION —



3-4. BLOCK DIAGRAM — DISPLAY SECTION —



3-5. CIRCUIT BOARDS LOCATION



3-6. NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

For schematic diagrams.

Note:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

- ▬ : B+ Line.
- ▬ ▬ : B– Line.
- ▭ : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- CD mechanism section
  no mark : CD PLAY
- Main (1/2), (2/2) and Display sections
  no mark : FM
  ( ) : AM
  < > : CD PLAY
  ✻ : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : CD PLAY
  ⇨ : FM
  ➡ : AM/MW/LW
  ⇨ : AUX
- Abbreviation
  CND : Canadian model.

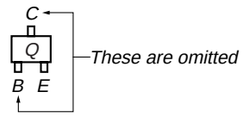
For printed wiring boards.

Note:

- o——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- ○ : Through hole.
- ▬ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

Caution:	
Pattern face side: (Side B)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Side A)	Parts on the parts face side seen from the parts face are indicated.



These are omitted

These are omitted

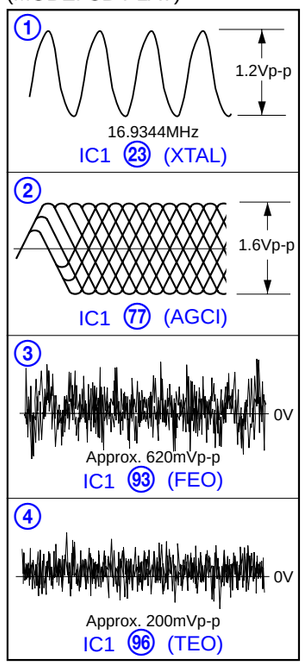
These are omitted

- Abbreviation
  CND : Canadian model.

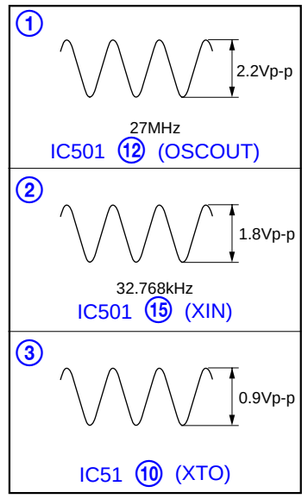
3-7. WAVEFORMS

— Servo Board —

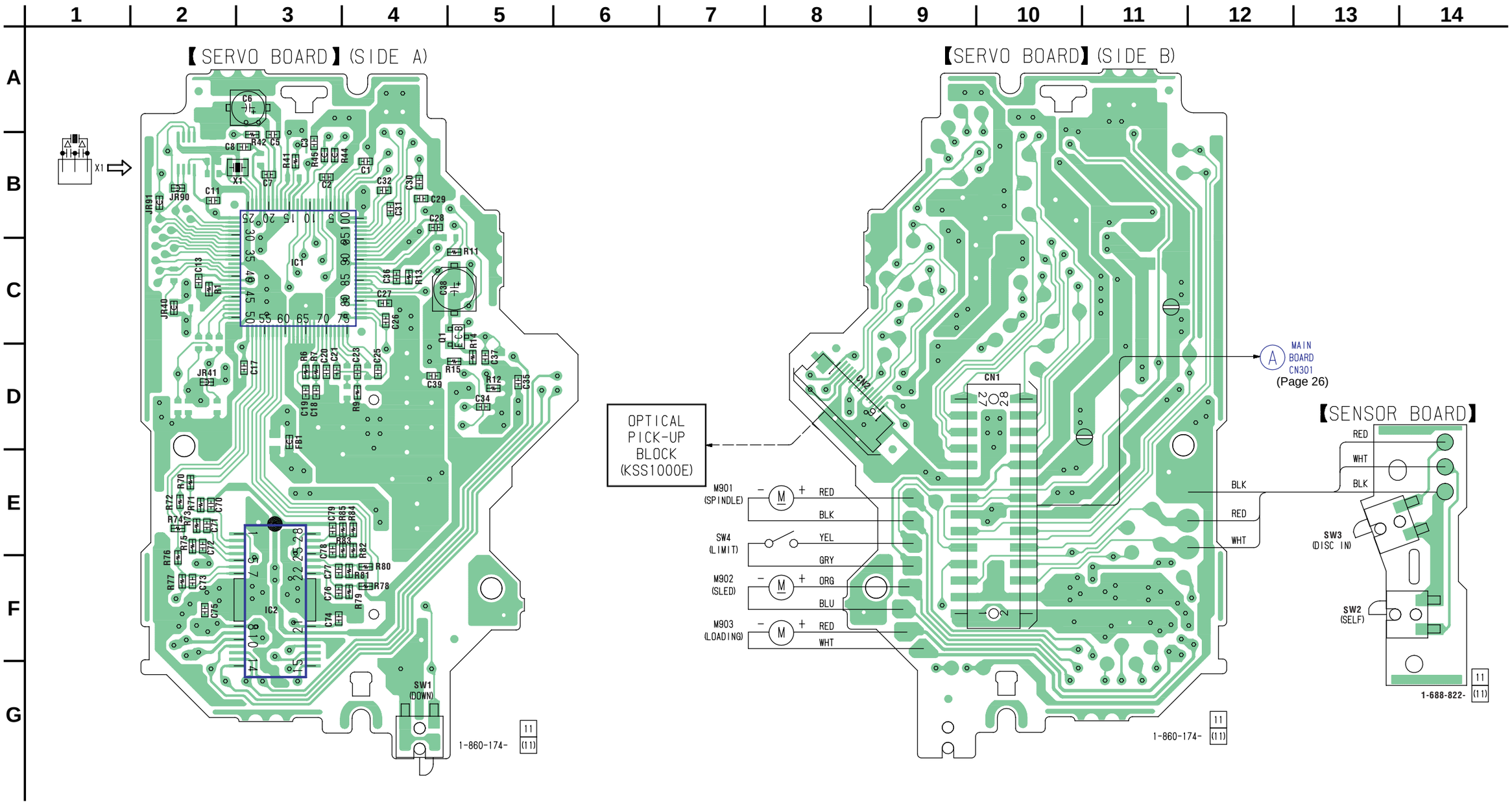
(MODE: CD PLAY)



— Main Board —



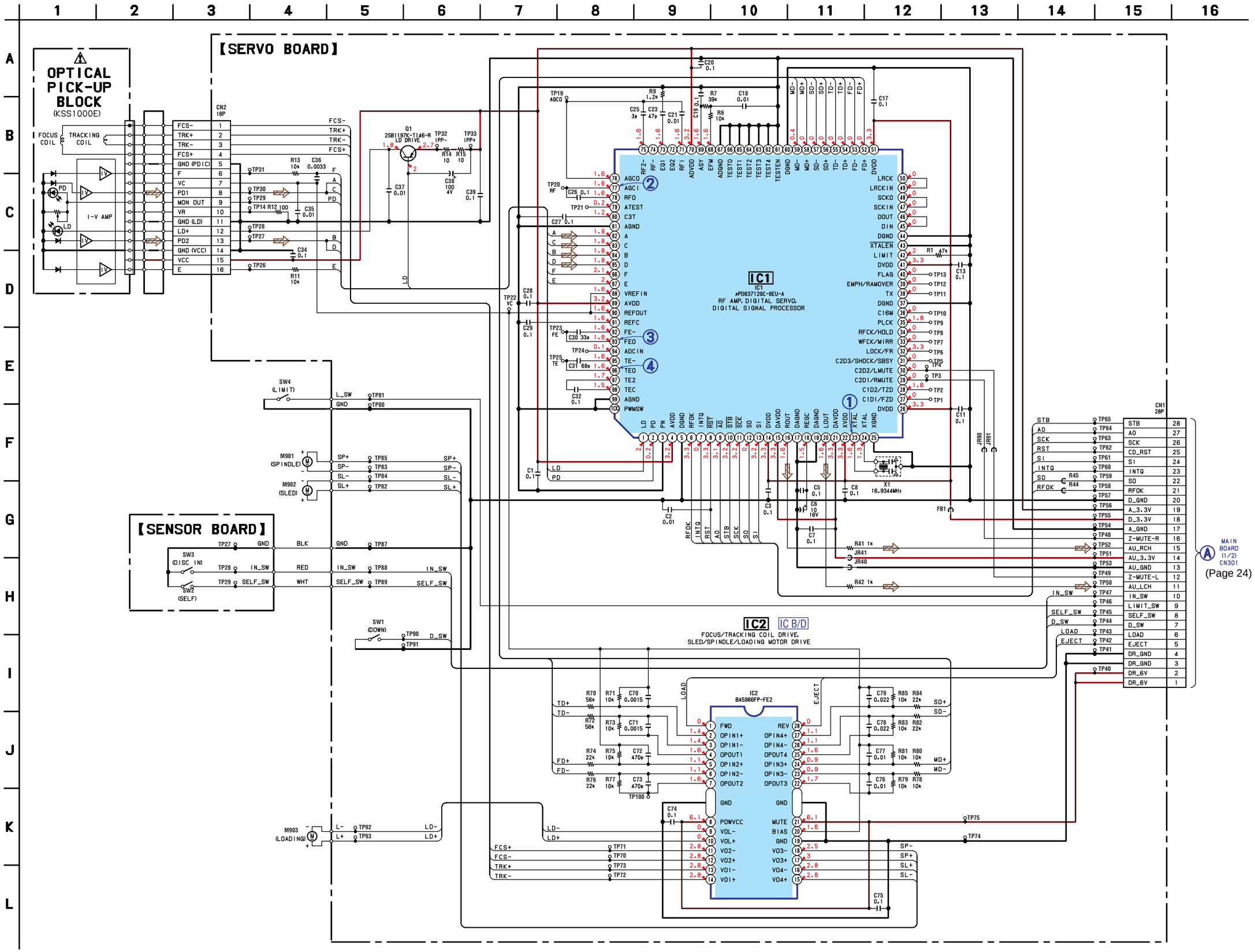
3-8. PRINTED WIRING BOARDS — CD MECHANISM SECTION — • Refer to page 20 for Circuit Boards Location. : Uses unleaded solder.



• Refer to page 21 for Waveforms.

3-9. SCHEMATIC DIAGRAM — CD MECHANISM SECTION —

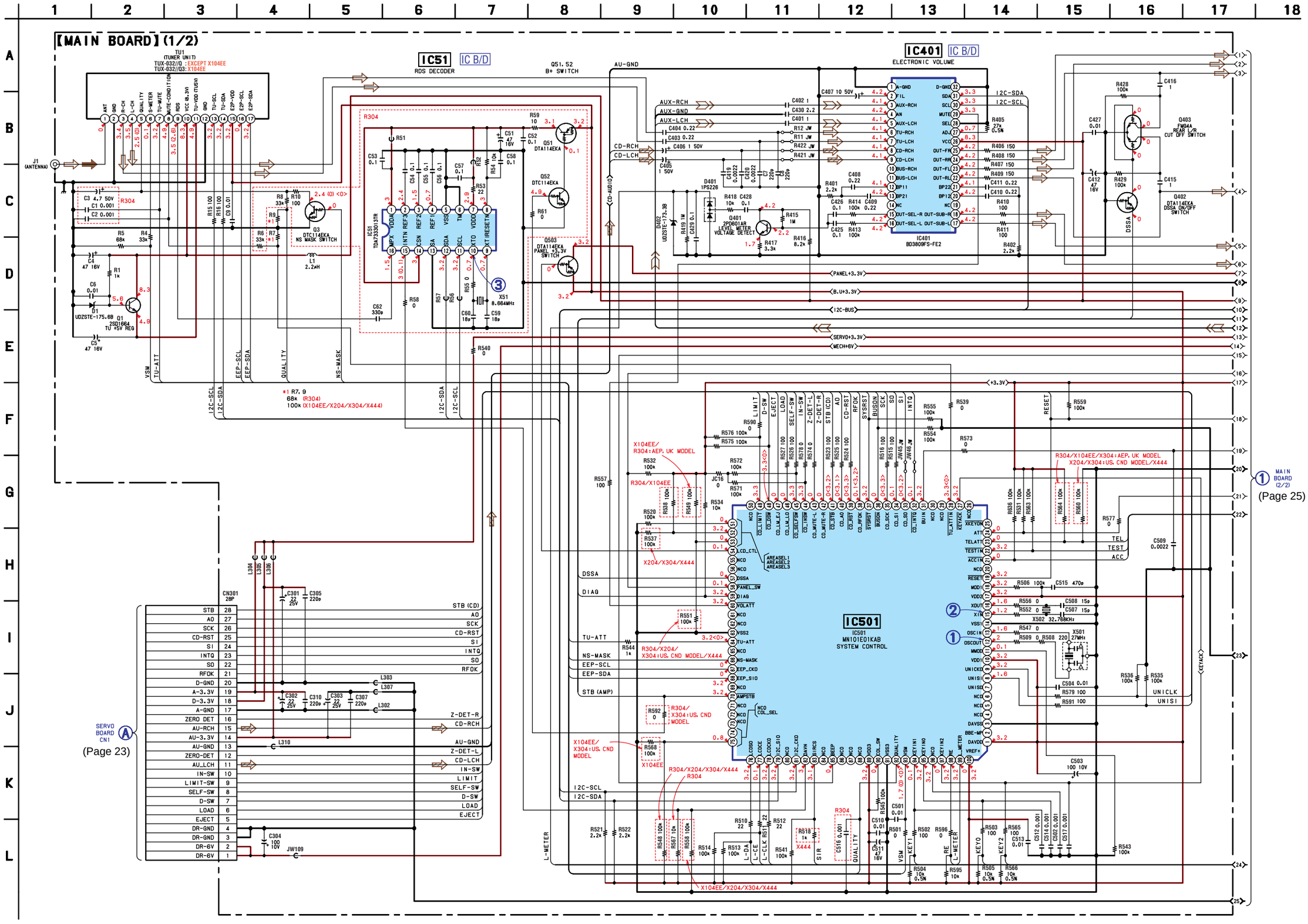
• Refer to page 29 for IC Block Diagram.



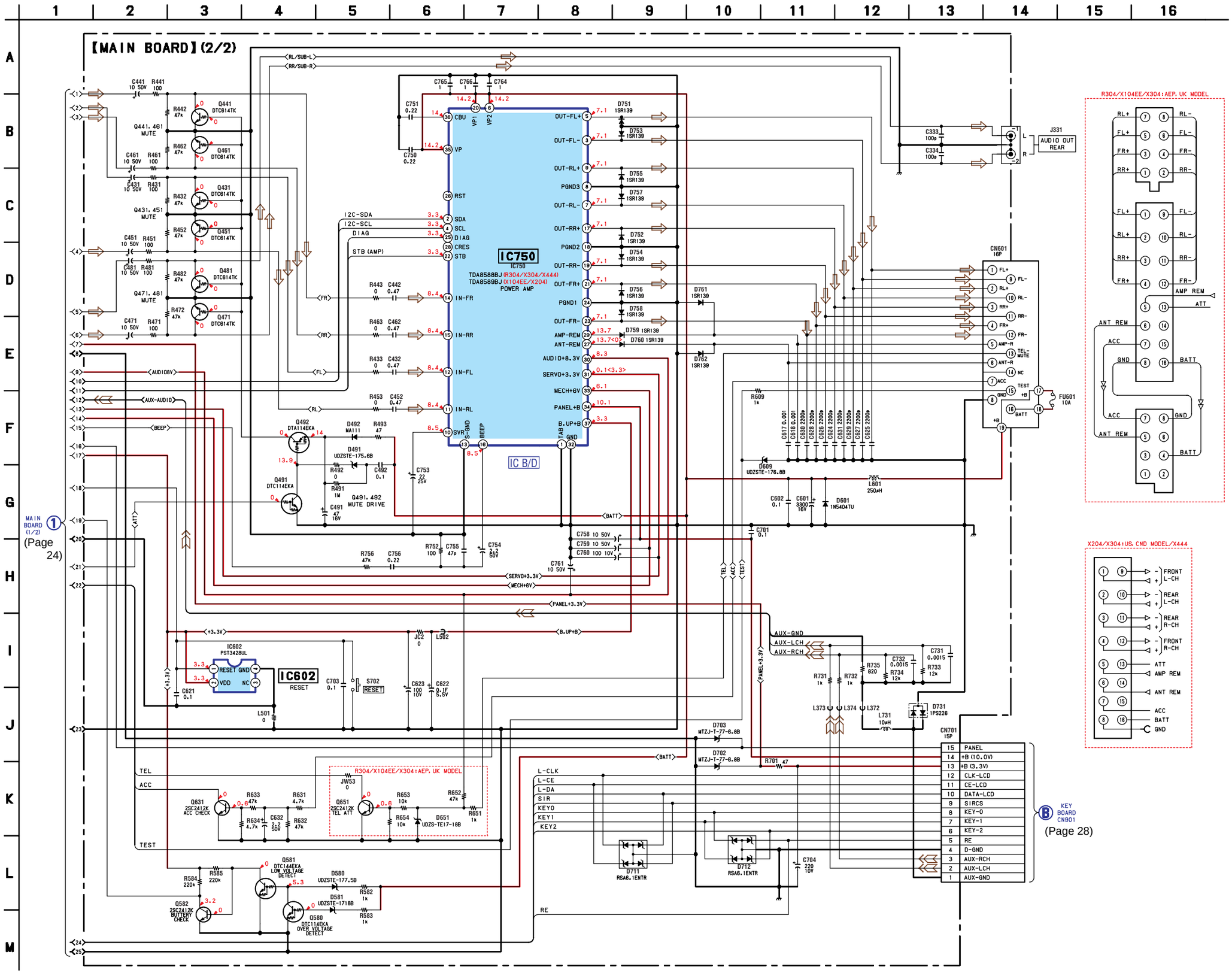
• Refer to page 21 for Waveforms.

3-10. SCHEMATIC DIAGRAM — MAIN SECTION (1/2) —

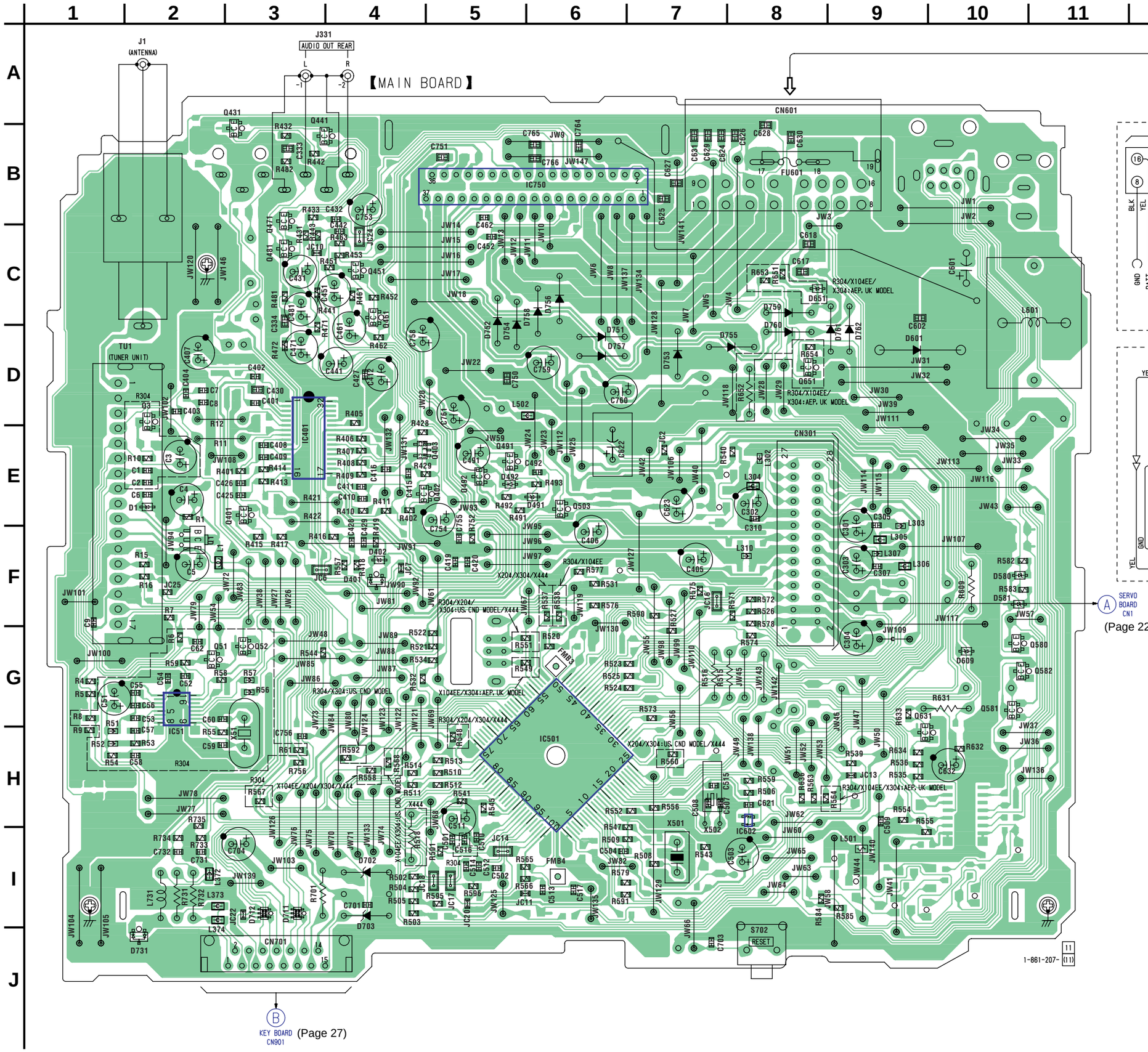
• Refer to page 29 for IC Block Diagrams.

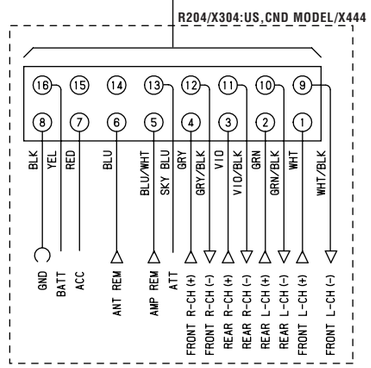


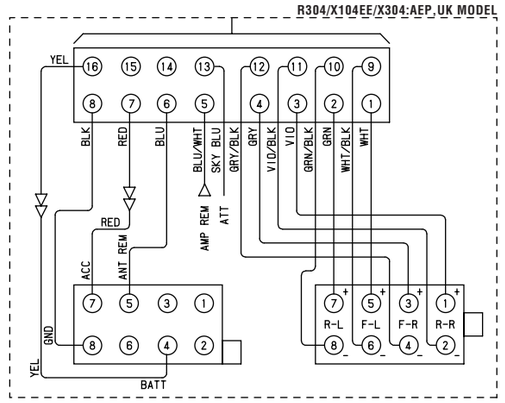
3-11. SCHEMATIC DIAGRAM — MAIN SECTION (2/2) — • Refer to page 31 for IC Block Diagram.



3-12. PRINTED WIRING BOARD — MAIN SECTION — • Refer to page 20 for Circuit Boards Location. : Uses unleaded solder.



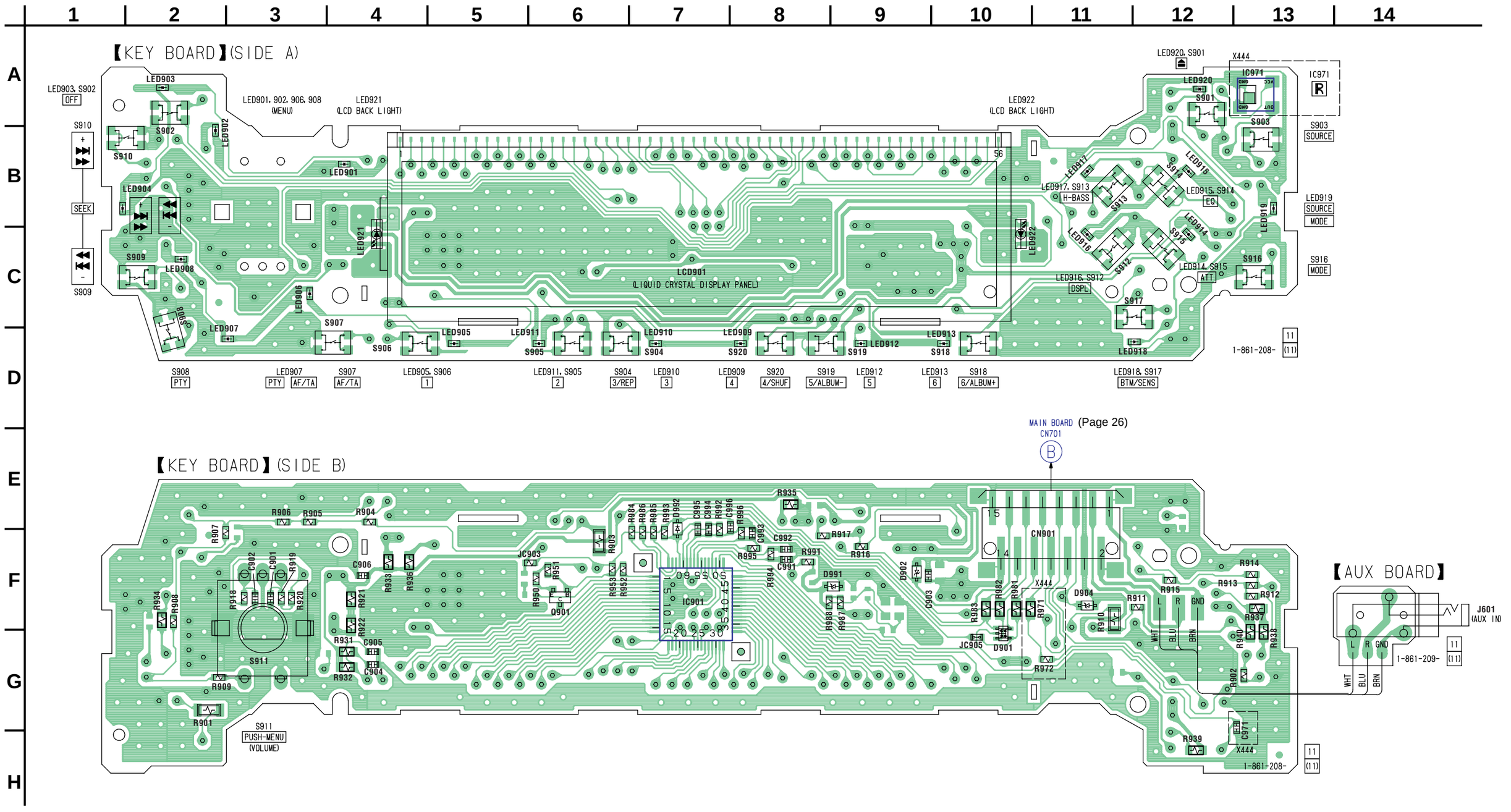




• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
D1	E-2	IC51	G-2
D401	F-4	IC401	E-3
D402	F-4	IC501	H-6
D491	E-6	IC602	H-8
D492	E-5	IC750	B-6
D580	F-10		
D581	F-10	Q1	F-2
D601	D-9	Q3	D-2
D609	G-10	Q51	G-2
D651	C-8	Q52	G-3
D702	I-4	Q401	E-3
D703	I-4	Q402	E-5
D711	I-3	Q403	E-4
D712	I-3	Q431	B-3
D731	J-2	Q441	B-3
D751	D-6	Q451	C-4
D752	D-5	Q461	C-4
D753	D-7	Q471	C-3
D754	D-5	Q481	C-3
D755	D-8	Q491	E-5
D756	C-6	Q492	E-5
D757	D-6	Q503	E-6
D758	C-6	Q580	G-10
D759	C-8	Q581	G-10
D760	D-8	Q582	G-10
D761	D-9	Q631	H-9
D762	D-9	Q651	D-8

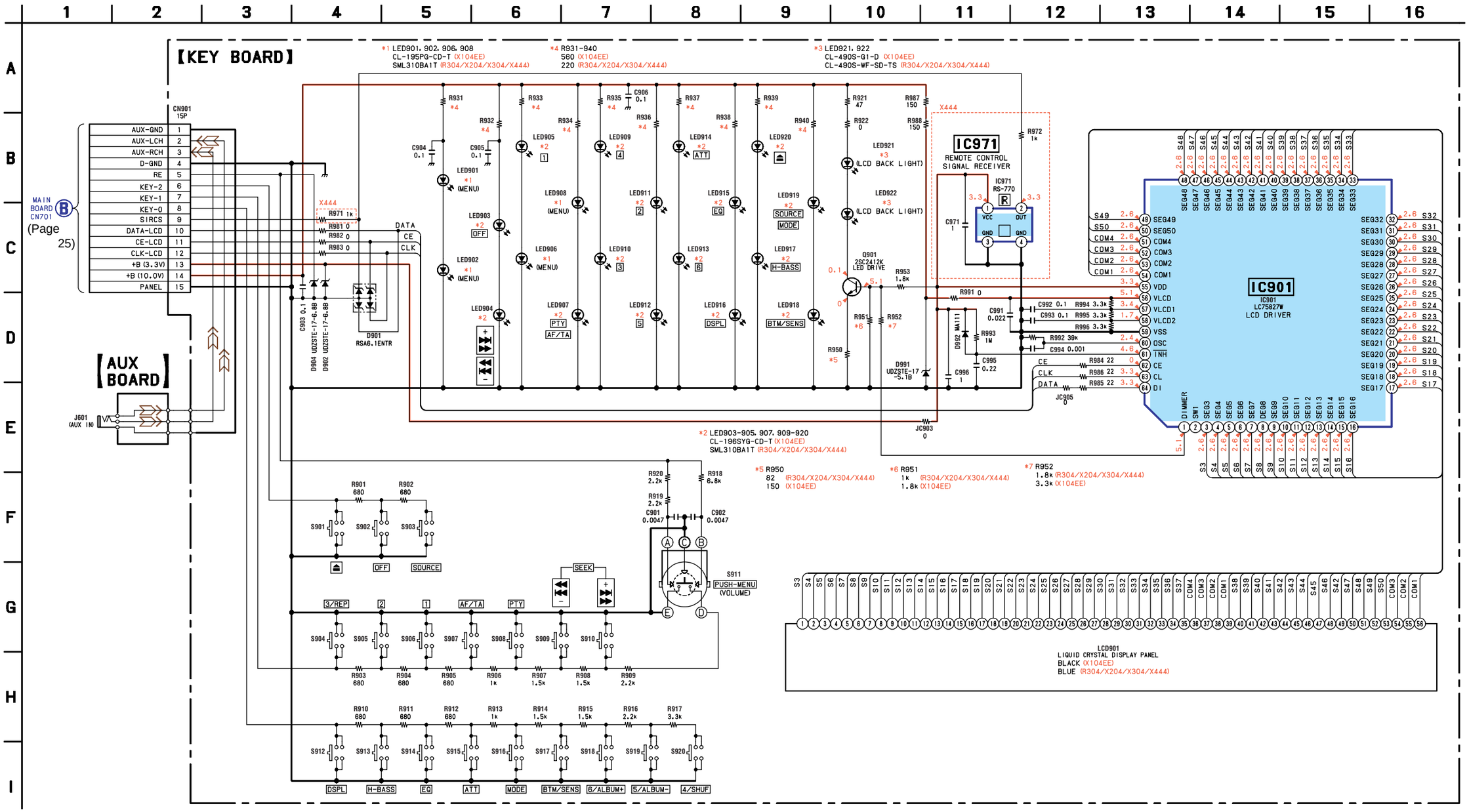
3-13. PRINTED WIRING BOARDS — DISPLAY SECTION — • Refer to page 20 for Circuit Boards Location. : Uses unleaded solder.



• Semiconductor Location

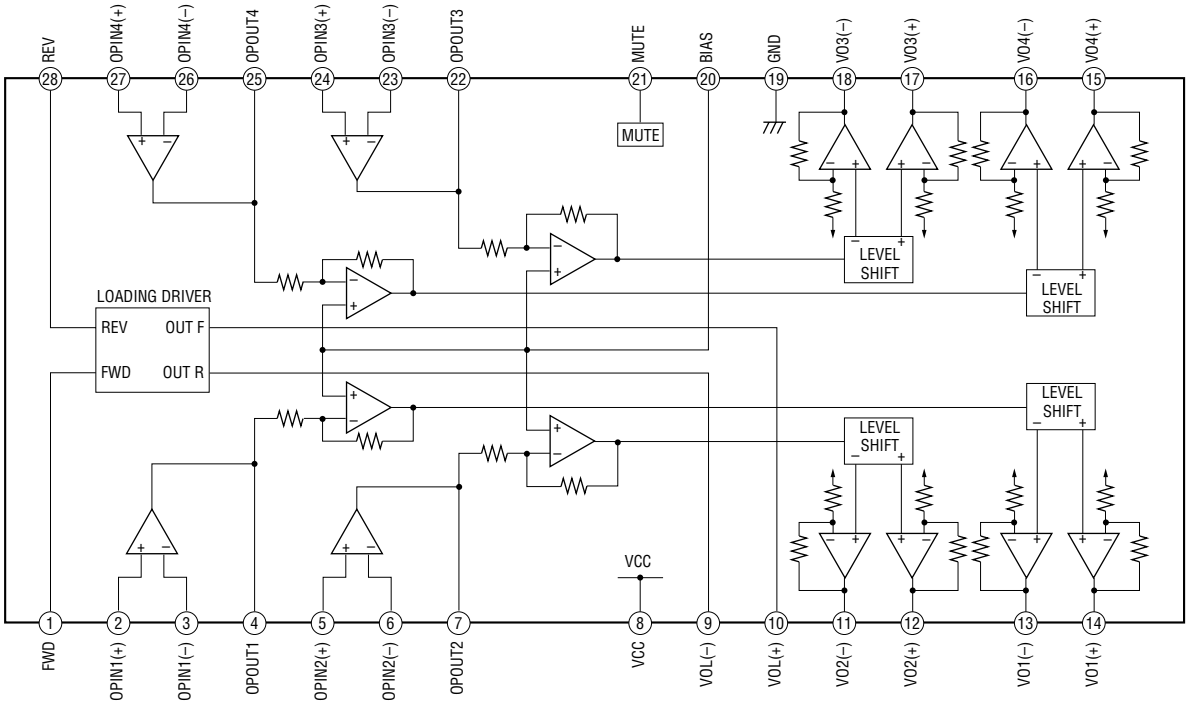
Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D901	G-10	LED903	A-2	LED914	C-12
D902	F-9	LED904	B-1	LED915	B-12
D904	F-11	LED905	D-5	LED916	C-11
D991	F-9	LED906	C-3	LED917	B-11
D992	E-7	LED907	D-2	LED918	D-11
		LED908	C-2	LED919	B-13
IC901	F-7	LED909	D-8	LED920	A-12
IC971	A-13	LED910	D-7	LED921	C-4
		LED911	D-6	LED922	C-10
LED901	B-4	LED912	D-9		
LED902	B-2	LED913	D-10	Q901	F-6

3-14. SCHEMATIC DIAGRAM — DISPLAY SECTION —

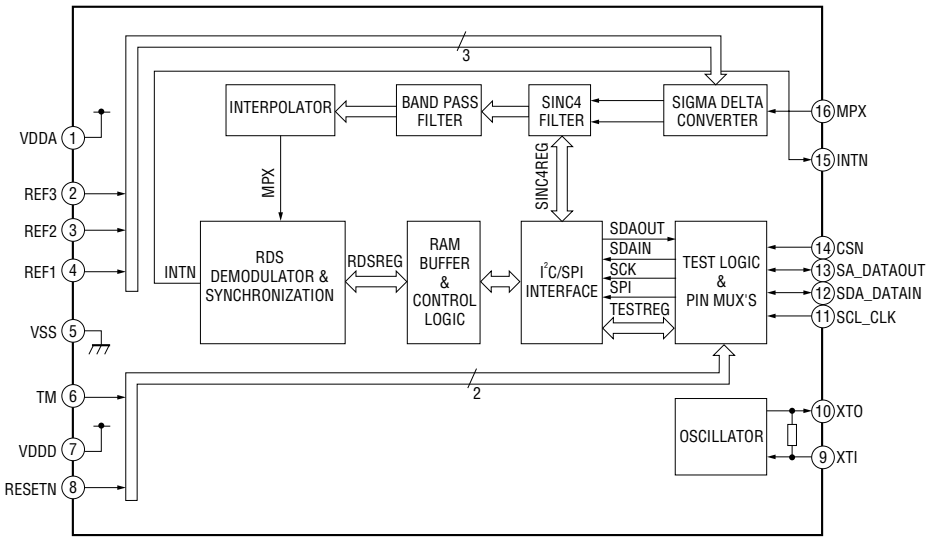


3-15. IC BLOCK DIAGRAMS

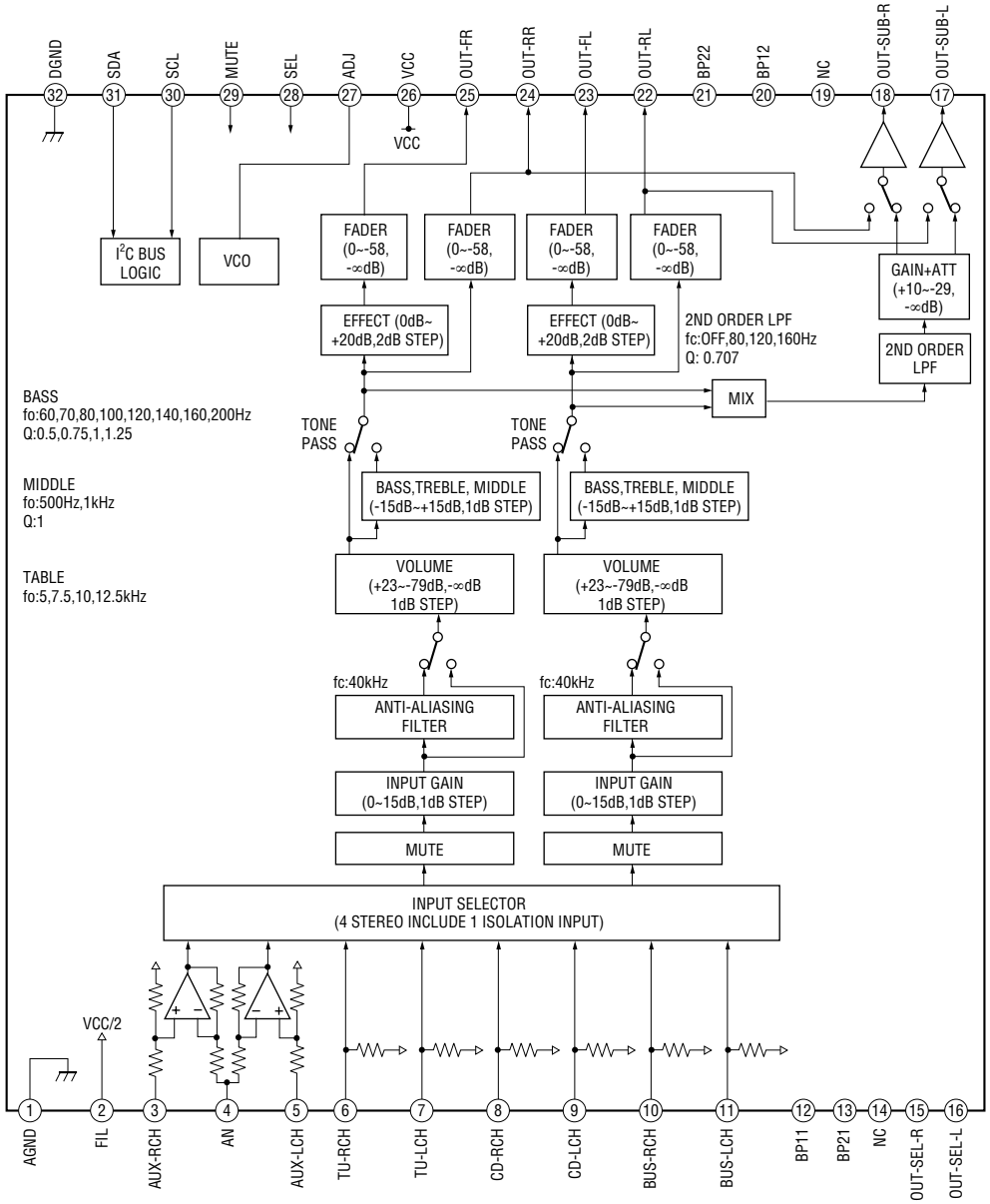
IC2 BA5966FP-FE2 (SERVO Board)



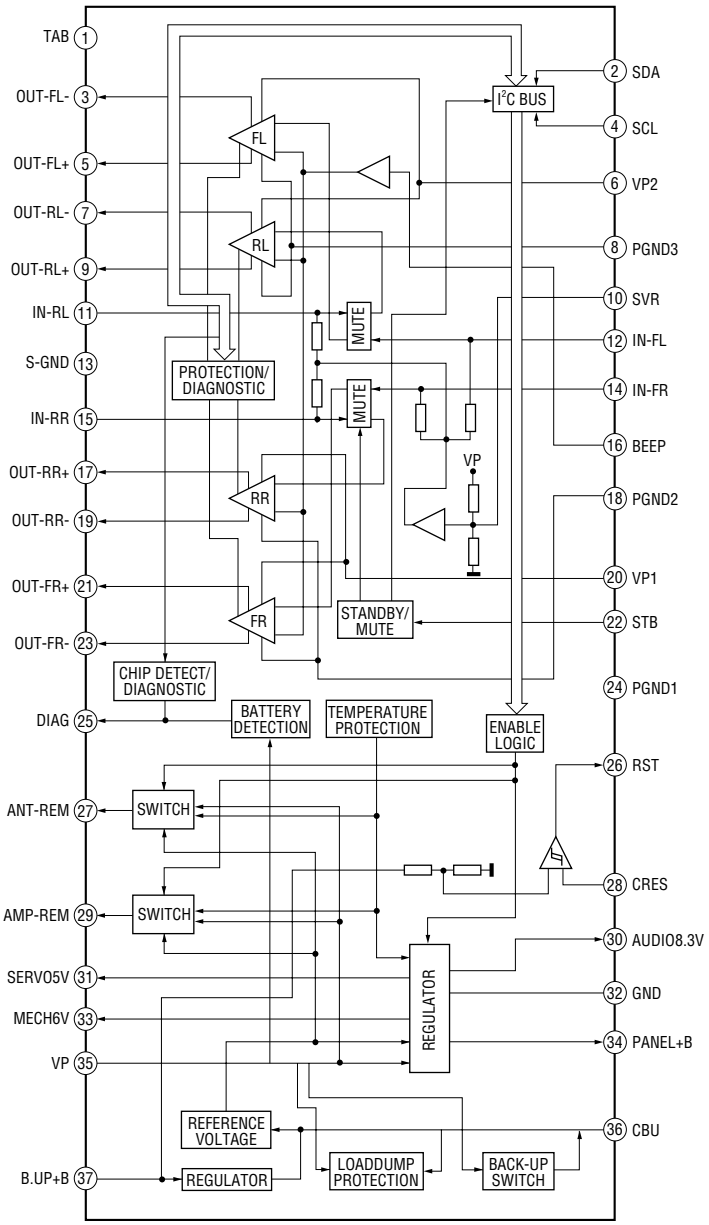
IC51 TDA7333-013TR (MAIN Board)



IC401 BD3809FS (MAIN Board)



IC750 TDA8588BJ/N2 (MAIN Board)
IC750 TDA8589BJ/N2 (MAIN Board)



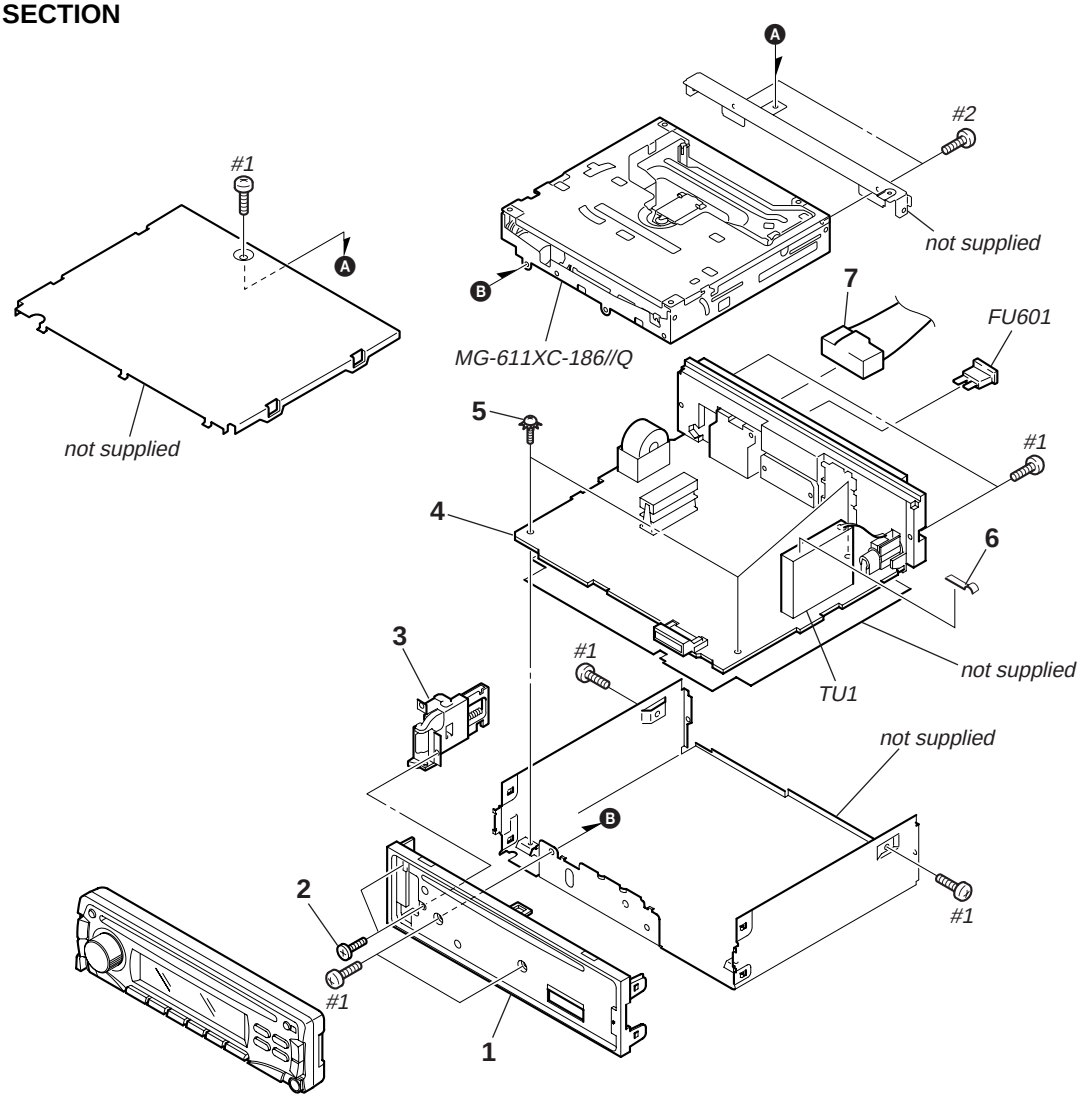
SECTION 4
EXPLODED VIEWS

NOTE:
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE) ... (RED)
  ↑ Parts Color ↑ Cabinet's Color
- Accessories are given in the last of this parts list.
- Abbreviation
  CND : Canadian model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

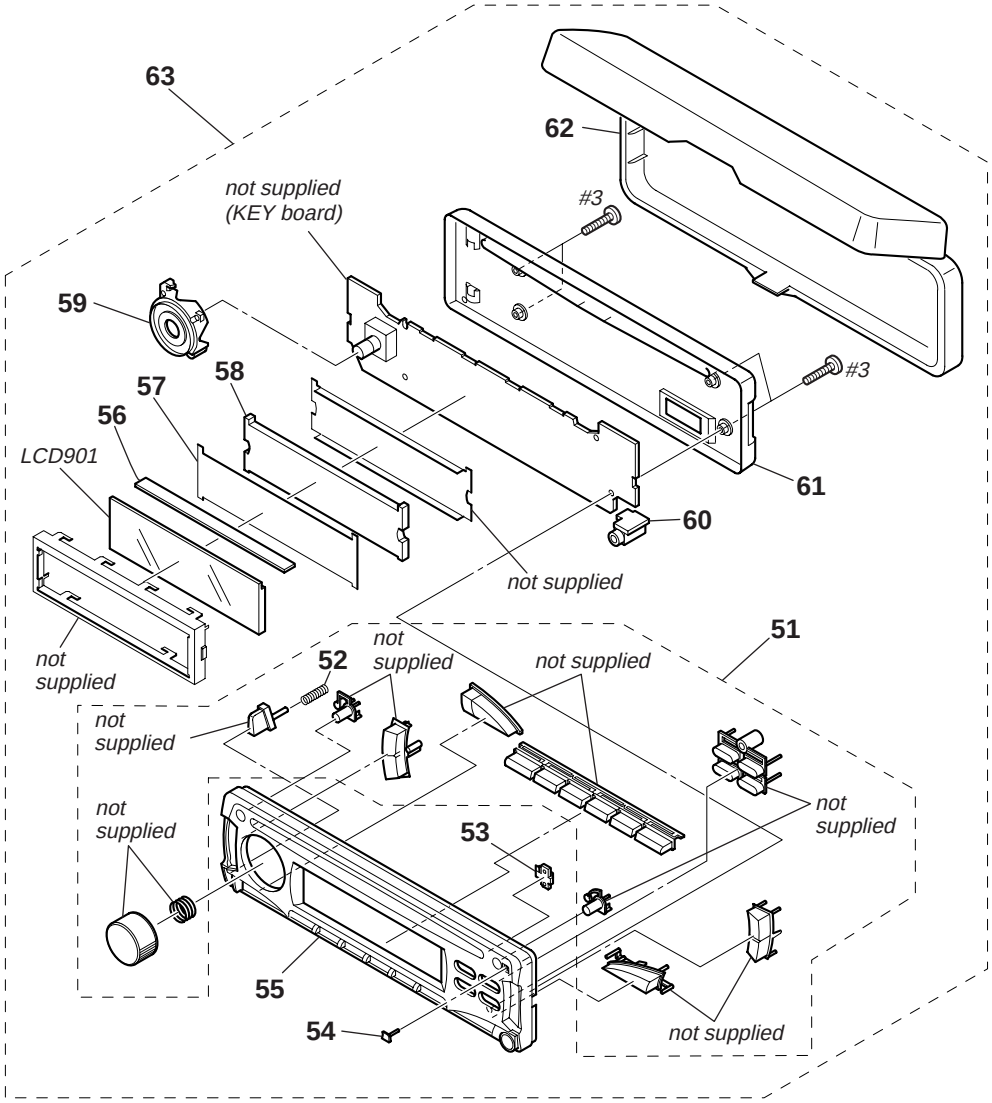
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

4-1. MAIN SECTION



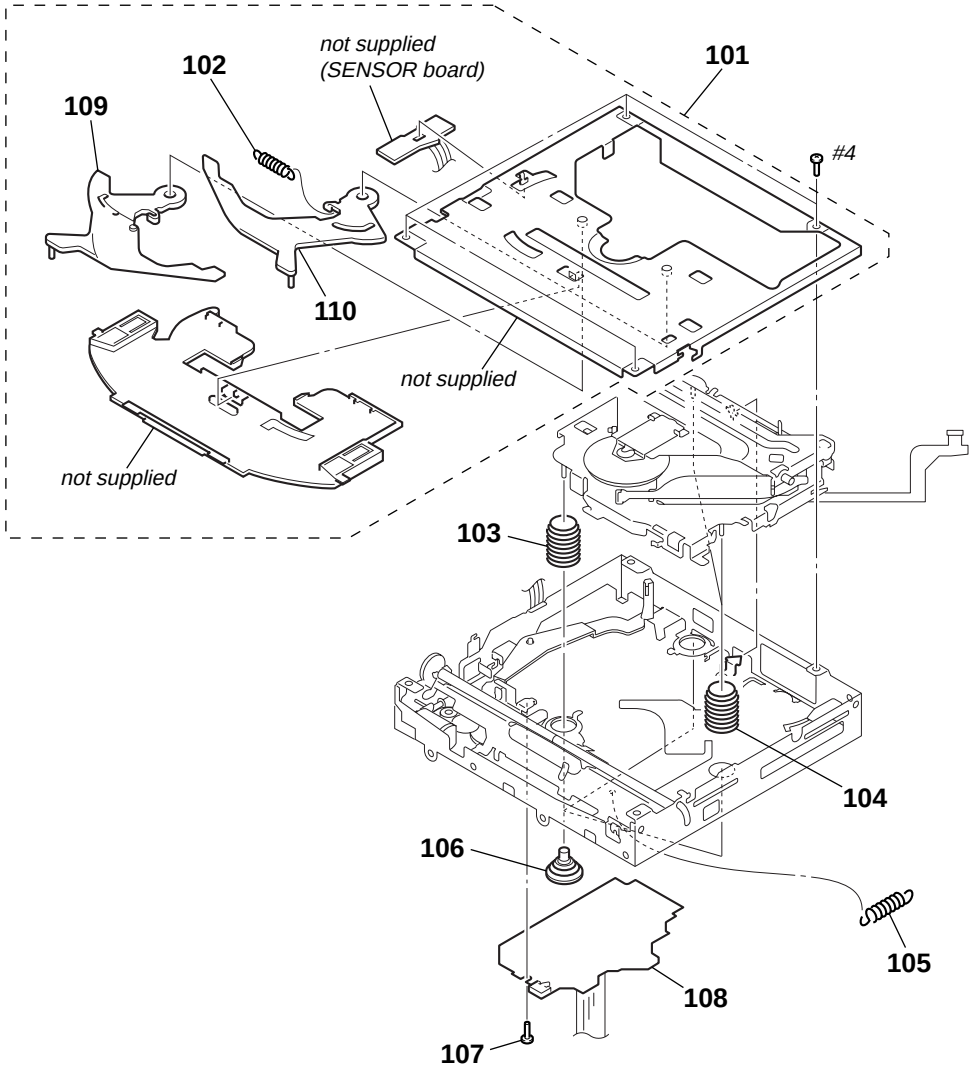
Ref. No.	Part No.	Description	Remark
1	X-3384-725-1	PANEL ASSY, SUB	
2	3-042-244-11	SCREW (T)	
3	X-3383-739-1	LOCK ASSY (S)	
4	A-3283-522-A	MAIN BOARD, COMPLETE (X204)	
4	A-3283-525-A	MAIN BOARD, COMPLETE (X304:US,CND)	
4	A-3283-526-A	MAIN BOARD, COMPLETE (X444)	
4	A-3283-530-A	MAIN BOARD, COMPLETE (X104EE)	
4	A-3283-535-A	MAIN BOARD, COMPLETE (X304:AEP,UK)	
4	A-3283-536-A	MAIN BOARD, COMPLETE (R304)	
5	3-376-464-11	SCREW (+PTT 2.6X6), GROUND POINT	
6	3-246-481-01	PLATE (TU), GROUND	
7	1-776-206-21	CORD (WITH CONNECTOR) (POWER) (US,CND)	
7	1-776-527-61	CORD (WITH CONNECTOR) (ISO) (POWER) (AEP,UK)	
FU601	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A	
TU1	A-3220-959-A	TUNER UNIT (TUX-032//Q) (EXCEPT X104EE)	
TU1	A-3220-961-A	TUNER UNIT (TUX-032//Q3) (X104EE)	
#1	7-685-792-09	SCREW +PTT 2.6X6 (S)	
#2	7-685-790-01	SCREW +PTT 2.6X4 (S)	

4-2. FRONT PANEL SECTION



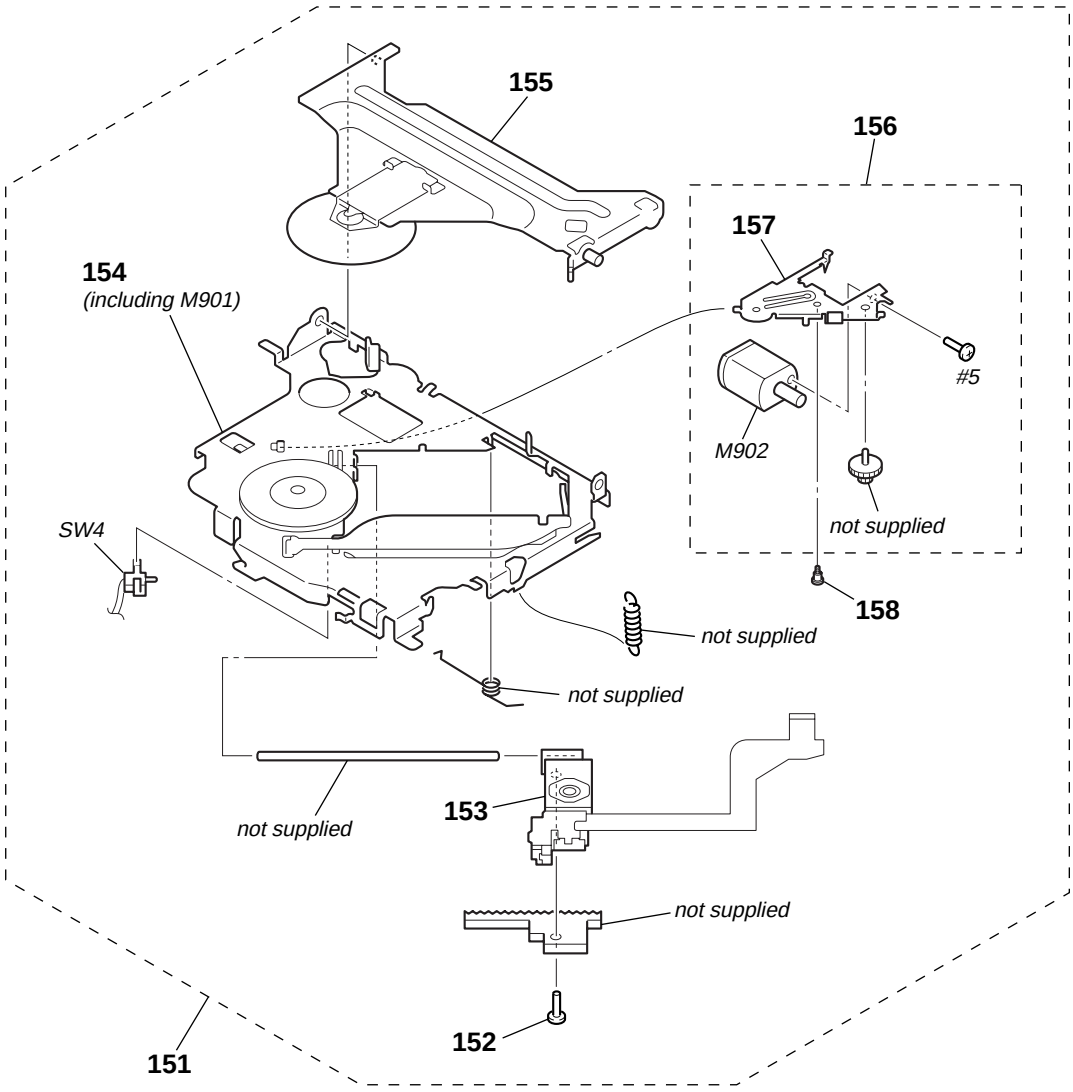
Ref. No.	Part No.	Description	Remark
51	X-3384-669-1	BUTTON ASSY (S) (X104EE)	
51	X-3384-689-1	BUTTON ASSY (S) (X204/X304/X444)	
51	X-3384-705-1	BUTTON ASSY (S) (R304)	
52	3-246-479-01	SPRING (RELEASE)	
53	3-262-376-01	GUIDE (CD), LIGHT	
54	3-262-377-01	FILTER (IR) (X444)	
54	3-262-377-11	FILTER (IR) (EXCEPT X444)	
55	3-262-353-01	PANEL, FRONT (X204)	
55	3-262-353-31	PANEL, FRONT (X304)	
55	3-262-353-41	PANEL, FRONT (X444)	
55	3-262-353-61	PANEL, FRONT (R304)	
55	3-262-353-81	PANEL, FRONT (X104EE)	
56	1-780-113-11	CONDUCTIVE BOARD, CONNECTION	
57	3-262-382-01	SHEET (LCD), REFLECTION	
58	3-262-380-01	ILLUMINATOR (LCD)	
59	3-262-374-01	GUIDE (VOLUME), LIGHT	
60	1-861-209-11	AUX BOARD	
61	3-262-355-01	PANEL, FRONT BACK	
62	X-3384-688-1	CASE ASSY (for FRONT PANEL)	
63	A-3372-822-A	PANEL COMPLETE ASSY, FRONT (X204)	
63	A-3372-828-A	PANEL COMPLETE ASSY, FRONT (X304)	
63	A-3372-836-A	PANEL COMPLETE ASSY, FRONT (X444)	
63	A-3372-847-A	PANEL COMPLETE ASSY, FRONT (X104EE)	
63	A-3372-863-A	PANEL COMPLETE ASSY, FRONT (R304)	
LCD901	1-805-519-11	DISPLAY PANEL, LIQUID CRYSTAL (EXCEPT X104EE)	
LCD901	1-805-520-11	DISPLAY PANEL, LIQUID CRYSTAL (X104EE)	
#3	7-685-106-19	SCREW +P 2X10 TYPE2 NON-SLIT	

4-3. CD MECHANISM SECTION (1)
(MG-611XC-186//Q)



Ref. No.	Part No.	Description	Remark
101	A-3372-444-A	CHASSIS (T) SUB ASSY	
102	3-253-729-11	SPRING (LTR), TENSION COIL	
103	3-257-892-11	SPRING (DAMPER), COIL	
104	3-257-892-01	SPRING (DAMPER), COIL	
105	3-253-695-11	SPRING (KF), TENSION COIL	
106	3-259-033-01	DAMPER (S)	
107	3-352-758-31	SCREW (M1.7), TOOTHED LOCK	
108	A-3283-339-A	SERVO BOARD, COMPLETE	
109	X-3384-088-1	LEVER (L) ASSY	
110	X-3384-089-1	LEVER (R) ASSY	
#4	7-627-552-87	SCREW, PRECISION +P 1.7X2.2	

4-4. CD MECHANISM SECTION (2)
(MG-611XC-186//Q)

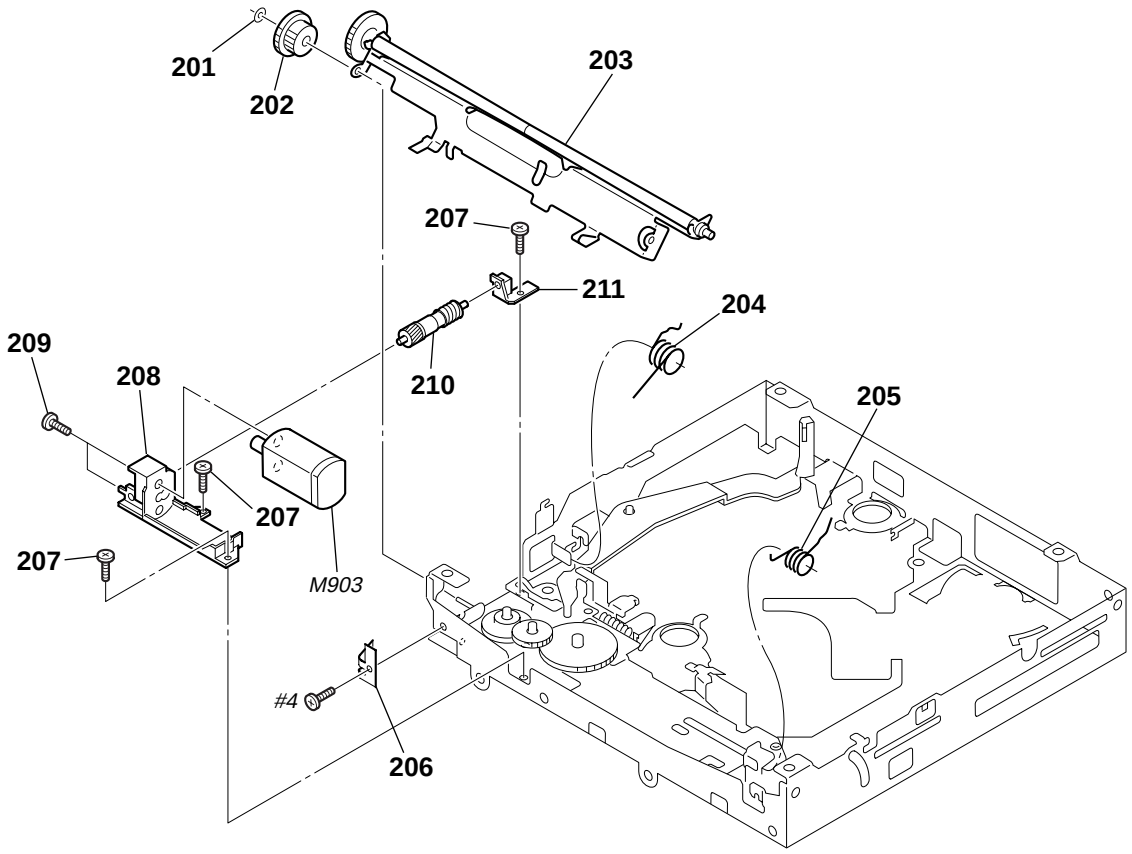


The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
151	A-3372-445-A	CHASSIS (OP) COMPLETE ASSY	
152	3-316-938-91	SCREW (B1.4X5), TAPPING	
⚠153	8-820-207-02	OPTICAL PICK-UP (KSS1000E/K1RP)	
154	A-3372-448-A	CHASSIS (OP) SUB ASSY (including M901)	
155	A-3372-449-A	ARM SUB ASSY, CHUCKING	
156	A-3372-446-A	LEVER (SL) SUB ASSY	

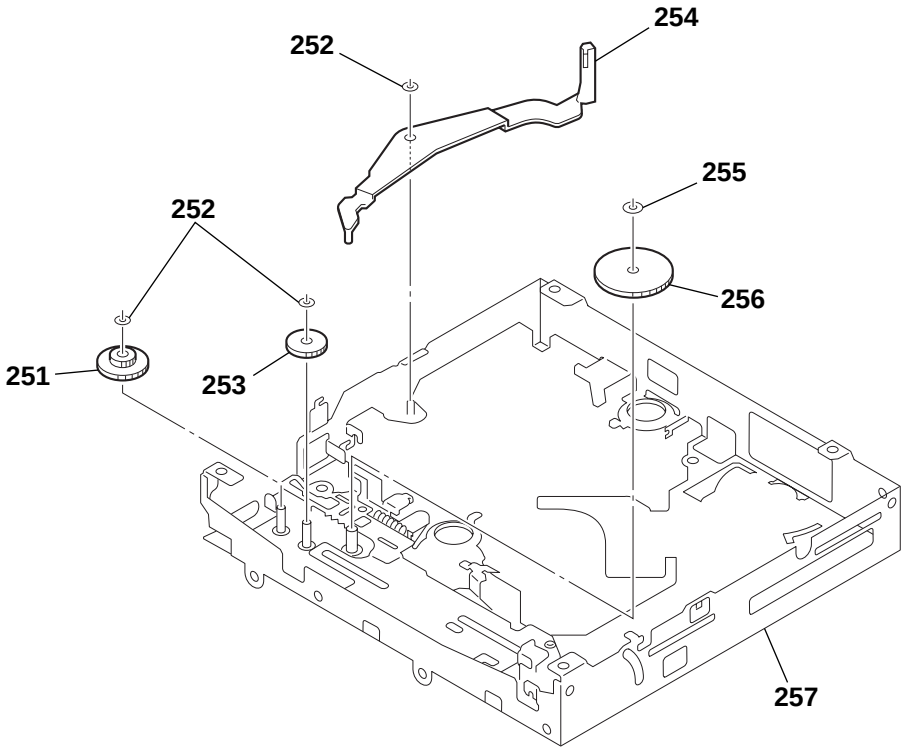
Ref. No.	Part No.	Description	Remark
157	X-3384-090-2	LEVER (SL) ASSY	
158	3-264-165-12	SCREW	
M902	A-3372-447-A	MOTOR ASSY, SL (SLED)	
SW4	1-571-099-11	SWITCH (1 KEY) (LIMIT)	
#5	7-627-850-77	SCREW, PRECISION +P 1.4X1.8	

4-5. CD MECHANISM SECTION (3)
(MG-611XC-186//Q)



Ref. No.	Part No.	Description	Remark
201	3-348-993-01	WASHER	
202	3-259-024-01	WHEEL (RA), WORM	
203	A-3372-441-A	ARM ASSY, ROLLER	
204	3-259-455-11	SPRING (RAL)	
205	3-253-713-11	SPRING (RAR)	
206	3-259-469-11	SPRING (LE), LEAF	
207	2-134-636-21	SCREW (M1.7X2.5)	
208	3-259-467-11	BRACKET (LEM)	
209	3-345-648-91	SCREW (M1.4), TOOTHED LOCK	
210	A-3372-450-A	WORM (LEB) ASSY	
211	3-259-468-11	BEARING (LEB)	
M903	A-3372-443-A	MOTOR ASSY, LE (LOADING)	
#4	7-627-552-87	SCREW, PRECISION +P 1.7X2.2	

4-6. CD MECHANISM SECTION (4)
(MG-611XC-186//Q)



Ref. No.	Part No.	Description	Remark
251	3-259-429-11	WHEEL (LE), WORM	
252	3-344-223-01	WASHER	
253	3-259-470-11	GEAR (LE1)	
254	3-253-755-11	LEVER (D)	

Ref. No.	Part No.	Description	Remark
255	3-899-829-01	WASHER (SLIT)	
256	3-259-032-01	GEAR (LE2)	
257	A-3337-998-A	CHASSIS (M) BLOCK ASSY	

AUX KEY

SECTION 5
ELECTRICAL PARTS LIST

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable

When indicating parts by reference number, please include the board.

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : µ, for example:
  uA.. : µA.. uPA.. : µPA..
  uPB.. : µPB.. uPC.. : µPC.. uPD.. : µPD..
- CAPACITORS
  uF : µF
- COILS
  uH : µH
- Abbreviation
  CND : Canadian model

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Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remark
	1-861-209-11	AUX BOARD			
		**********			
		< JACK >			
J601	1-817-308-11	JACK (AUX IN)			
**********					
		KEY BOARD			
		**********			
	1-780-113-11	CONDUCTIVE BOARD, CONNECTION			
	3-262-380-01	ILLUMINATOR (LCD)			
	3-262-382-01	SHEET (LCD), REFLECTION			
		< CAPACITOR >			
C901	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C902	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C903	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C904	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C905	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C906	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C971	1-115-156-11	CERAMIC CHIP	1uF		10V (X444)
C991	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C992	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C993	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C994	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C995	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C996	1-115-156-11	CERAMIC CHIP	1uF		10V
		< CONNECTOR >			
CN901	1-817-332-11	PLUG, CONNECTOR 15P			
		< DIODE >			
D901	6-500-886-01	DIODE RSA6.1ENTR			
D902	8-719-978-33	DIODE DTZ-TT11-6.8B			
D904	8-719-978-33	DIODE DTZ-TT11-6.8B			
D991	8-719-069-54	DIODE UDZS-TE17-5.1B			
D992	8-719-404-50	DIODE MA111-TX			
		< IC >			
IC901	6-705-180-01	IC LC75827W			
IC971	6-600-163-01	IC RS-770 (IR) (X444)			

Ref. No.	Part No.	Description			Remark
		< JUMPER RESISTOR >			
JC903	1-216-864-11	METAL CHIP	0	5%	1/10W
JC905	1-216-864-11	METAL CHIP	0	5%	1/10W
		< LIQUID CRYSTAL DISPLAY >			
LCD901	1-805-519-11	DISPLAY PANEL, LIQUID CRYSTAL			(EXCEPT X104EE)
LCD901	1-805-520-11	DISPLAY PANEL, LIQUID CRYSTAL (X104EE)			
		< DIODE >			
LED901	6-500-476-01	LED SML310BA1TT86 (MENU)			(EXCEPT X104EE)
LED901	6-500-510-01	LED CL-195PG-CD-T (MENU) (X104EE)			
LED902	6-500-476-01	LED SML310BA1TT86 (MENU)			(EXCEPT X104EE)
LED902	6-500-510-01	LED CL-195PG-CD-T (MENU) (X104EE)			
LED903	6-500-476-01	LED SML310BA1TT86 (OFF) (EXCEPT X104EE)			
LED903	6-500-594-01	LED CL-196SYG-CD-T (OFF) (X104EE)			
LED904	6-500-476-01	LED SML310BA1TT86 (+ ▶▶I ▶▶, ◀◀ I◀◀ –)			(EXCEPT X104EE)
LED904	6-500-594-01	LED CL-196SYG-CD-T (+ ▶▶I ▶▶, ◀◀ I◀◀ –)			(X104EE)
LED905	6-500-476-01	LED SML310BA1TT86 (1) (EXCEPT X104EE)			
LED905	6-500-594-01	LED CL-196SYG-CD-T (1) (X104EE)			
LED906	6-500-476-01	LED SML310BA1TT86 (MENU)			(EXCEPT X104EE)
LED906	6-500-510-01	LED CL-195PG-CD-T (MENU) (X104EE)			
LED907	6-500-476-01	LED SML310BA1TT86 (PTY,AF/TA)			(EXCEPT X104EE)
LED907	6-500-594-01	LED CL-196SYG-CD-T (PTY,AF/TA) (X104EE)			
LED908	6-500-476-01	LED SML310BA1TT86 (MENU)			(EXCEPT X104EE)
LED908	6-500-510-01	LED CL-195PG-CD-T (MENU) (X104EE)			
LED909	6-500-476-01	LED SML310BA1TT86 (4) (EXCEPT X104EE)			
LED909	6-500-594-01	LED CL-196SYG-CD-T (4) (X104EE)			
LED910	6-500-476-01	LED SML310BA1TT86 (3) (EXCEPT X104EE)			
LED910	6-500-594-01	LED CL-196SYG-CD-T (3) (X104EE)			
LED911	6-500-476-01	LED SML310BA1TT86 (2) (EXCEPT X104EE)			
LED911	6-500-594-01	LED CL-196SYG-CD-T (2) (X104EE)			
LED912	6-500-476-01	LED SML310BA1TT86 (5) (EXCEPT X104EE)			
LED912	6-500-594-01	LED CL-196SYG-CD-T (5) (X104EE)			
LED913	6-500-476-01	LED SML310BA1TT86 (6) (EXCEPT X104EE)			
LED913	6-500-594-01	LED CL-196SYG-CD-T (6) (X104EE)			
LED914	6-500-476-01	LED SML310BA1TT86 (ATT) (EXCEPT X104EE)			
LED914	6-500-594-01	LED CL-196SYG-CD-T (ATT) (X104EE)			

KEY

Ref. No.	Part No.	Description			Remark
LED915	6-500-476-01	LED SML310BA1TT86 (EQ) (EXCEPT X104EE)			
LED915	6-500-594-01	LED CL-196SYG-CD-T (EQ) (X104EE)			
LED916	6-500-476-01	LED SML310BA1TT86 (DSPL)			(EXCEPT X104EE)
LED916	6-500-594-01	LED CL-196SYG-CD-T (DSPL) (X104EE)			
LED917	6-500-476-01	LED SML310BA1TT86 (H-BASS)			(EXCEPT X104EE)
LED917	6-500-594-01	LED CL-196SYG-CD-T (H-BASS) (X104EE)			
LED918	6-500-476-01	LED SML310BA1TT86 (BTM/SENS)			(EXCEPT X104EE)
LED918	6-500-594-01	LED CL-196SYG-CD-T (BTM/SENS) (X104EE)			
LED919	6-500-476-01	LED SML310BA1TT86 (SOURCE,MODE)			(EXCEPT X104EE)
LED919	6-500-594-01	LED CL-196SYG-CD-T (SOURCE,MODE)			(X104EE)
LED920	6-500-476-01	LED SML310BA1TT86 (⏏) (EXCEPT X104EE)			
LED920	6-500-594-01	LED CL-196SYG-CD-T (⏏) (X104EE)			
LED921	6-500-855-01	LED CL-490S-WF-SD-TS (LCD BACK LIGHT)			(EXCEPT X104EE)
LED921	6-500-878-01	LED CL-490S-G1-D (LCD BACK LIGHT)			(X104EE)
LED922	6-500-855-01	LED CL-490S-WF-SD-TS (LCD BACK LIGHT)			(EXCEPT X104EE)
LED922	6-500-878-01	LED CL-490S-G1-D (LCD BACK LIGHT)			(X104EE)
		< TRANSISTOR >			
Q901	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
		< RESISTOR >			
R901	1-216-194-00	METAL CHIP	680	5%	1/8W
R902	1-216-819-11	METAL CHIP	680	5%	1/10W
R903	1-216-194-00	METAL CHIP	680	5%	1/8W
R904	1-216-819-11	METAL CHIP	680	5%	1/10W
R905	1-216-819-11	METAL CHIP	680	5%	1/10W
R906	1-216-821-11	METAL CHIP	1K	5%	1/10W
R907	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R908	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R909	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R910	1-216-194-00	METAL CHIP	680	5%	1/8W
R911	1-216-819-11	METAL CHIP	680	5%	1/10W
R912	1-216-819-11	METAL CHIP	680	5%	1/10W
R913	1-216-821-11	METAL CHIP	1K	5%	1/10W
R914	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R915	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R916	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R917	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R918	1-218-867-11	METAL CHIP	6.8K	5%	1/10W
R919	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R920	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R921	1-216-017-11	RES-CHIP	47	5%	1/10W
R922	1-216-295-11	SHORT CHIP	0		
R931	1-216-033-00	METAL CHIP	220	5%	1/10W (EXCEPT X104EE)
R931	1-216-043-00	RES-CHIP	560	5%	1/10W (X104EE)
R932	1-216-033-00	METAL CHIP	220	5%	1/10W (EXCEPT X104EE)
R932	1-216-043-00	RES-CHIP	560	5%	1/10W (X104EE)
R933	1-216-033-00	METAL CHIP	220	5%	1/10W (EXCEPT X104EE)
R933	1-216-043-00	RES-CHIP	560	5%	1/10W (X104EE)
R934	1-216-033-00	METAL CHIP	220	5%	1/10W (EXCEPT X104EE)
R934	1-216-043-00	RES-CHIP	560	5%	1/10W (X104EE)
R935	1-216-033-00	METAL CHIP	220	5%	1/10W (EXCEPT X104EE)
R935	1-216-043-00	RES-CHIP	560	5%	1/10W (X104EE)
R936	1-216-033-00	METAL CHIP	220	5%	1/10W (EXCEPT X104EE)
R936	1-216-043-00	RES-CHIP	560	5%	1/10W (X104EE)
R937	1-216-033-00	METAL CHIP	220	5%	1/10W (EXCEPT X104EE)
R937	1-216-043-00	RES-CHIP	560	5%	1/10W (X104EE)
R938	1-216-033-00	METAL CHIP	220	5%	1/10W (EXCEPT X104EE)
R938	1-216-043-00	RES-CHIP	560	5%	1/10W (X104EE)
R939	1-216-033-00	METAL CHIP	220	5%	1/10W (EXCEPT X104EE)
R939	1-216-043-00	RES-CHIP	560	5%	1/10W (X104EE)
R940	1-216-033-00	METAL CHIP	220	5%	1/10W (EXCEPT X104EE)
R940	1-216-043-00	RES-CHIP	560	5%	1/10W (X104EE)
R950	1-216-808-11	METAL CHIP	82	5%	1/10W (EXCEPT X104EE)
R950	1-216-811-11	METAL CHIP	150	5%	1/10W (X104EE)
R951	1-216-821-11	METAL CHIP	1K	5%	1/10W (EXCEPT X104EE)
R951	1-216-824-11	METAL CHIP	1.8K	5%	1/10W (X104EE)
R952	1-216-824-11	METAL CHIP	1.8K	5%	1/10W (EXCEPT X104EE)
R952	1-216-827-11	METAL CHIP	3.3K	5%	1/10W (X104EE)
R953	1-216-824-11	METAL CHIP	1.8K	5%	1/10W
R971	1-216-049-11	RES-CHIP	1K	5%	1/10W
R972	1-216-821-11	METAL CHIP	1K	5%	1/10W (X444)
R981	1-216-295-11	SHORT CHIP	0		
R982	1-216-295-11	SHORT CHIP	0		
R983	1-216-295-11	SHORT CHIP	0		
R984	1-216-801-11	METAL CHIP	22	5%	1/10W
R985	1-216-801-11	METAL CHIP	22	5%	1/10W
R986	1-216-801-11	METAL CHIP	22	5%	1/10W
R987	1-216-811-11	METAL CHIP	150	5%	1/10W
R988	1-216-811-11	METAL CHIP	150	5%	1/10W
R991	1-216-864-11	METAL CHIP	0	5%	1/10W
R992	1-216-840-11	METAL CHIP	39K	5%	1/10W
R993	1-216-857-11	METAL CHIP	1M	5%	1/10W
R994	1-216-827-11	METAL CHIP	3.3K	5%	1/10W

KEY MAIN

Ref. No.	Part No.	Description			Remark
R995	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R996	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
		< SWITCH >			
S901	1-771-884-31	SWITCH, TACTILE (⏏)			
S902	1-771-884-31	SWITCH, TACTILE (OFF)			
S903	1-771-884-31	SWITCH, TACTILE (SOURCE)			
S904	1-771-884-31	SWITCH, TACTILE (3/REP)			
S905	1-771-884-31	SWITCH, TACTILE (2)			
S906	1-771-884-31	SWITCH, TACTILE (1)			
S907	1-771-884-31	SWITCH, TACTILE (AF/TA)			
S908	1-771-884-31	SWITCH, TACTILE (PTY)			
S909	1-771-884-31	SWITCH, TACTILE (SEEK ◀◀ I◀◀ –)			
S910	1-771-884-31	SWITCH, TACTILE (SEEK + ▶▶I ▶▶)			
S911	1-478-474-11	ENCODER, ROTARY (VOLUME,PUSH-MENU)			
S912	1-771-884-31	SWITCH, TACTILE (DSPL)			
S913	1-771-884-31	SWITCH, TACTILE (H-BASS)			
S914	1-771-884-31	SWITCH, TACTILE (EQ)			
S915	1-771-884-31	SWITCH, TACTILE (ATT)			
S916	1-771-884-31	SWITCH, TACTILE (MODE)			
S917	1-771-884-31	SWITCH, TACTILE (BTM/SENS)			
S918	1-771-884-31	SWITCH, TACTILE (6/ALBUM +)			
S919	1-771-884-31	SWITCH, TACTILE (5/ALBUM –)			
S920	1-771-884-31	SWITCH, TACTILE (4/SHUF)			
**********					
	A-3283-522-A	MAIN BOARD, COMPLETE (X204)			
	A-3283-525-A	MAIN BOARD, COMPLETE (X304:US,CND)			
	A-3283-526-A	MAIN BOARD, COMPLETE (X444)			
	A-3283-530-A	MAIN BOARD, COMPLETE (X104EE)			
	A-3283-535-A	MAIN BOARD, COMPLETE (X304:AEP,UK)			
	A-3283-536-A	MAIN BOARD, COMPLETE (R304)			
		**********			
	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT			
	7-685-793-09	SCREW +PTT 2.6X8 (S)			
	7-685-795-09	SCREW +PTT 2.6X12 (S)			
		< CAPACITOR >			
C1	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V (R304)
C2	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V (R304)
C3	1-126-963-11	ELECT	4.7uF	20%	50V (R304)
C4	1-126-947-11	ELECT	47uF	20%	16V
C5	1-126-947-11	ELECT	47uF	20%	16V
C6	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C7	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C8	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C9	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C51	1-126-947-11	ELECT	47uF	20%	16V (R304)
C52	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (R304)
C53	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (R304)
C54	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (R304)
C55	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (R304)
C56	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (R304)
C57	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (R304)
C58	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (R304)
C59	1-162-918-11	CERAMIC CHIP	18PF	5%	50V (R304)
C60	1-162-918-11	CERAMIC CHIP	18PF	5%	50V (R304)
C62	1-162-959-11	CERAMIC CHIP	330PF	5%	50V (R304)
C301	1-128-551-11	ELECT	22uF	20%	25V
C302	1-128-551-11	ELECT	22uF	20%	25V
C303	1-128-551-11	ELECT	22uF	20%	25V
C304	1-104-665-11	ELECT	100uF	20%	10V
C305	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C307	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C310	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C333	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C334	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C401	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C402	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C403	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C404	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C405	1-126-960-11	ELECT	1uF	20%	50V
C406	1-126-960-11	ELECT	1uF	20%	50V
C407	1-126-964-11	ELECT	10uF	20%	50V
C408	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C409	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C410	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C411	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C412	1-126-947-11	ELECT	47uF	20%	16V
C415	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C416	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C419	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C420	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C425	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C426	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C427	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C428	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C429	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C430	1-125-889-11	CERAMIC CHIP	2.2uF	10%	10V
C431	1-126-964-11	ELECT	10uF	20%	50V
C432	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C441	1-126-964-11	ELECT	10uF	20%	50V
C442	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C451	1-126-964-11	ELECT	10uF	20%	50V
C452	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C461	1-126-964-11	ELECT	10uF	20%	50V
C462	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C471	1-126-964-11	ELECT	10uF	20%	50V
C481	1-126-964-11	ELECT	10uF	20%	50V
C491	1-126-947-11	ELECT	47uF	20%	16V
C492	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C501	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C502	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C503	1-104-665-11	ELECT	100uF	20%	10V
C504	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V

Ref. No.	Part No.	Description			Remark
C507	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C508	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C509	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C510	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C511	1-126-947-11	ELECT	47uF	20%	16V
C512	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C513	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C514	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C515	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C516	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V (R304)
C517	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C601	1-131-868-81	ELECT	3300uF	20%	16V
C602	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C617	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C618	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C621	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C622	1-125-710-11	DOUBLE LAYERS	0.1F		5.5V
C623	1-104-665-11	ELECT	100uF	20%	10V
C624	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C625	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C626	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C627	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C628	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C629	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C630	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C631	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C632	1-126-961-11	ELECT	2.2uF	20%	50V
C701	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C703	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C704	1-126-934-11	ELECT	220uF	20%	10V
C731	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C732	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C750	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C751	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C753	1-128-551-11	ELECT	22uF	20%	25V
C754	1-126-961-11	ELECT	2.2uF	20%	50V
C755	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C756	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C758	1-126-964-11	ELECT	10uF	20%	50V
C759	1-126-964-11	ELECT	10uF	20%	50V
C760	1-104-665-11	ELECT	100uF	20%	10V
C761	1-126-964-11	ELECT	10uF	20%	50V
C764	1-165-822-11	CERAMIC CHIP	1uF		25V
C765	1-165-822-11	CERAMIC CHIP	1uF		25V
C766	1-165-822-11	CERAMIC CHIP	1uF		25V

< CONNECTOR >

CN301	1-817-536-11	CONNECTOR, BOARD TO BOARD 28P
CN601	1-774-701-21	PIN, CONNECTOR 16P
CN701	1-817-333-11	SOCKET, CONNECTOR 15P

< DIODE >

D1	8-719-069-55	DIODE	UDZS-TE17-5.6B
D401	8-719-062-51	DIODE	1PS226-115
D402	6-500-697-01	DIODE	UDZS-TE17-3.3B
D491	8-719-069-55	DIODE	UDZS-TE17-5.6B
D492	8-719-404-50	DIODE	MA111-TX
D580	8-719-056-84	DIODE	UDZ-TE-17-7.5B
D581	8-719-083-66	DIODE	UDZS-TE17-18B
D601	8-719-049-38	DIODE	1N5404TU
D609	8-719-978-33	DIODE	DTZ-TT11-6.8B
D651	8-719-083-66	DIODE	UDZS-TE17-18B (AEP,UK)
D702	8-719-109-97	DIODE	RD6.8ES-B2
D703	8-719-109-97	DIODE	RD6.8ES-B2
D711	6-500-886-01	DIODE	RSA6.1ENTR
D712	6-500-886-01	DIODE	RSA6.1ENTR
D731	8-719-062-51	DIODE	1PS226-115
D751	8-719-970-02	DIODE	1SR139-400
D752	8-719-970-02	DIODE	1SR139-400
D753	8-719-970-02	DIODE	1SR139-400
D754	8-719-970-02	DIODE	1SR139-400
D755	8-719-970-02	DIODE	1SR139-400
D756	8-719-970-02	DIODE	1SR139-400
D757	8-719-970-02	DIODE	1SR139-400
D758	8-719-970-02	DIODE	1SR139-400
D759	8-719-970-02	DIODE	1SR139-400
D760	8-719-970-02	DIODE	1SR139-400
D761	8-719-970-02	DIODE	1SR139-400
D762	8-719-970-02	DIODE	1SR139-400

< IC >

IC51	6-803-747-01	IC TDA7333-013TR (R304)
IC401	6-705-518-01	IC BD3809FS-FE2
IC501	6-803-840-01	IC MN101E01KAB
IC602	8-759-659-13	IC PST3428UL
IC750	6-705-360-01	IC TDA8588BJ/N2 (R304/X304/X444)
IC750	6-705-363-01	IC TDA8589BJ/N2 (X104EE/X204)

< JACK >

J1	1-815-185-13	JACK (ANTENNA)
J331	1-774-698-11	JACK, PIN 2P (AUDIO OUT REAR)

< JUMPER RESISTOR >

JC2	1-216-864-11	METAL CHIP	0	5%	1/10W
JC6	1-216-296-11	SHORT CHIP	0		
JC7	1-216-864-11	METAL CHIP	0	5%	1/10W
JC10	1-216-864-11	METAL CHIP	0	5%	1/10W
JC11	1-216-864-11	METAL CHIP	0	5%	1/10W
JC13	1-216-864-11	METAL CHIP	0	5%	1/10W
JC14	1-216-296-11	SHORT CHIP	0		
JC16	1-216-296-11	SHORT CHIP	0		
JC17	1-216-296-11	SHORT CHIP	0		
JC18	1-216-296-11	SHORT CHIP	0		
JC20	1-216-864-11	METAL CHIP	0	5%	1/10W
JC22	1-216-864-11	METAL CHIP	0	5%	1/10W
JC24	1-216-296-11	SHORT CHIP	0		
JC25	1-216-864-11	METAL CHIP	0	5%	1/10W

< COIL >

JW109	1-410-396-41	INDUCTOR, FERRITE BEAD	
L1	1-469-844-11	INDUCTOR	2.2uH
L302	1-469-876-11	INDUCTOR, FERRITE BEAD	
L303	1-469-876-11	INDUCTOR, FERRITE BEAD	
L304	1-500-245-11	INDUCTOR, FERRITE BEAD	

MAIN

Ref. No.	Part No.	Description			Remark
L305	1-500-245-11	INDUCTOR, FERRITE BEAD			
L306	1-500-245-11	INDUCTOR, FERRITE BEAD			
L307	1-469-876-11	INDUCTOR, FERRITE BEAD			
L310	1-469-876-11	INDUCTOR, FERRITE BEAD			
L372	1-469-876-11	INDUCTOR, FERRITE BEAD			
L373	1-500-245-11	INDUCTOR, FERRITE BEAD			
L374	1-500-245-11	INDUCTOR, FERRITE BEAD			
L501	1-216-864-11	METAL CHIP	0	5%	1/10W
L502	1-500-245-11	INDUCTOR, FERRITE BEAD			
L601	1-456-617-11	COIL, CHOKE	250uH		
L731	1-410-509-11	INDUCTOR	10uH		
		< TRANSISTOR >			
Q1	8-729-106-68	TRANSISTOR	2SD1615A-GP		
Q3	8-729-027-43	TRANSISTOR	DTC114EKA-T146 (R304)		
Q51	8-729-027-23	TRANSISTOR	DTA114EKA-T146 (R304)		
Q52	8-729-027-43	TRANSISTOR	DTC114EKA-T146 (R304)		
Q401	8-729-422-33	TRANSISTOR	2SD601A-Q-TX		
Q402	8-729-027-23	TRANSISTOR	DTA114EKA-T146		
Q403	8-729-035-74	TRANSISTOR	FMG4AT148		
Q431	6-550-752-01	TRANSISTOR	DTC614TKT146		
Q441	6-550-752-01	TRANSISTOR	DTC614TKT146		
Q451	6-550-752-01	TRANSISTOR	DTC614TKT146		
Q461	6-550-752-01	TRANSISTOR	DTC614TKT146		
Q471	6-550-752-01	TRANSISTOR	DTC614TKT146		
Q481	6-550-752-01	TRANSISTOR	DTC614TKT146		
Q491	8-729-027-43	TRANSISTOR	DTC114EKA-T146		
Q492	8-729-027-23	TRANSISTOR	DTA114EKA-T146		
Q503	8-729-027-23	TRANSISTOR	DTA114EKA-T146		
Q580	8-729-027-43	TRANSISTOR	DTC114EKA-T146		
Q581	1-801-806-11	TRANSISTOR	DTC144EKA		
Q582	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q631	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q651	8-729-120-28	TRANSISTOR	2SC1623-L5L6 (AEP,UK)		
		< RESISTOR >			
R1	1-216-821-11	METAL CHIP	1K	5%	1/10W
R4	1-216-839-11	METAL CHIP	33K	5%	1/10W
R5	1-216-843-11	METAL CHIP	68K	5%	1/10W
R6	1-216-839-11	METAL CHIP	33K	5%	1/10W (R304)
R7	1-216-843-11	METAL CHIP	68K	5%	1/10W (R304)
R7	1-216-845-11	METAL CHIP	100K	5%	1/10W (EXCEPT R304)
R8	1-216-839-11	METAL CHIP	33K	5%	1/10W (R304)
R9	1-216-843-11	METAL CHIP	68K	5%	1/10W (R304)
R9	1-216-845-11	METAL CHIP	100K	5%	1/10W (EXCEPT R304)
R10	1-216-809-11	METAL CHIP	100	5%	1/10W (R304)
R15	1-216-809-11	METAL CHIP	100	5%	1/10W
R16	1-216-809-11	METAL CHIP	100	5%	1/10W
R51	1-414-595-11	INDUCTOR, FERRITE BEAD (R304)			
R52	1-414-595-11	INDUCTOR, FERRITE BEAD (R304)			
R53	1-216-801-11	METAL CHIP	22	5%	1/10W (R304)
R54	1-216-833-11	METAL CHIP	10K	5%	1/10W (R304)
R55	1-216-864-11	METAL CHIP	0	5%	1/10W (R304)
R56	1-414-595-11	INDUCTOR, FERRITE BEAD (R304)			
R57	1-414-595-11	INDUCTOR, FERRITE BEAD (R304)			
R58	1-216-864-11	METAL CHIP	0	5%	1/10W (R304)
R59	1-216-797-11	METAL CHIP	10	5%	1/10W (R304)
R61	1-216-864-11	METAL CHIP	0	5%	1/10W (R304)
R401	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R402	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R405	1-218-881-11	METAL CHIP	27K	0.5%	1/10W
R406	1-216-811-11	METAL CHIP	150	5%	1/10W
R407	1-216-811-11	METAL CHIP	150	5%	1/10W
R408	1-216-811-11	METAL CHIP	150	5%	1/10W
R409	1-216-811-11	METAL CHIP	150	5%	1/10W
R410	1-216-809-11	METAL CHIP	100	5%	1/10W
R411	1-216-809-11	METAL CHIP	100	5%	1/10W
R413	1-216-845-11	METAL CHIP	100K	5%	1/10W
R414	1-216-845-11	METAL CHIP	100K	5%	1/10W
R415	1-216-857-11	METAL CHIP	1M	5%	1/10W
R416	1-216-832-11	METAL CHIP	8.2K	5%	1/10W
R417	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R418	1-216-833-11	METAL CHIP	10K	5%	1/10W
R419	1-216-857-11	METAL CHIP	1M	5%	1/10W
R428	1-216-845-11	METAL CHIP	100K	5%	1/10W
R429	1-216-845-11	METAL CHIP	100K	5%	1/10W
R431	1-216-809-11	METAL CHIP	100	5%	1/10W
R432	1-216-841-11	METAL CHIP	47K	5%	1/10W
R433	1-216-864-11	METAL CHIP	0	5%	1/10W
R441	1-216-809-11	METAL CHIP	100	5%	1/10W
R442	1-216-841-11	METAL CHIP	47K	5%	1/10W
R443	1-216-864-11	METAL CHIP	0	5%	1/10W
R451	1-216-809-11	METAL CHIP	100	5%	1/10W
R452	1-216-841-11	METAL CHIP	47K	5%	1/10W
R453	1-216-864-11	METAL CHIP	0	5%	1/10W
R461	1-216-809-11	METAL CHIP	100	5%	1/10W
R462	1-216-841-11	METAL CHIP	47K	5%	1/10W
R463	1-216-864-11	METAL CHIP	0	5%	1/10W
R471	1-216-809-11	METAL CHIP	100	5%	1/10W
R472	1-216-841-11	METAL CHIP	47K	5%	1/10W
R481	1-216-809-11	METAL CHIP	100	5%	1/10W
R482	1-216-841-11	METAL CHIP	47K	5%	1/10W
R491	1-216-857-11	METAL CHIP	1M	5%	1/10W
R492	1-216-864-11	METAL CHIP	0	5%	1/10W
R493	1-216-805-11	METAL CHIP	47	5%	1/10W
R501	1-216-864-11	METAL CHIP	0	5%	1/10W
R502	1-216-809-11	METAL CHIP	100	5%	1/10W
R503	1-216-809-11	METAL CHIP	100	5%	1/10W
R504	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R505	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R506	1-216-845-11	METAL CHIP	100K	5%	1/10W
R508	1-216-813-11	METAL CHIP	220	5%	1/10W (EXCEPT X304)
R509	1-216-864-11	METAL CHIP	0	5%	1/10W
R510	1-216-801-11	METAL CHIP	22	5%	1/10W

Ref. No.	Part No.	Description			Remark
R511	1-216-801-11	METAL CHIP	22	5%	1/10W
R512	1-216-801-11	METAL CHIP	22	5%	1/10W
R513	1-216-845-11	METAL CHIP	100K	5%	1/10W
R514	1-216-845-11	METAL CHIP	100K	5%	1/10W
R515	1-247-807-31	CARBON	100	5%	1/4W
R516	1-247-807-31	CARBON	100	5%	1/4W
R518	1-249-417-11	CARBON	1K	5%	1/4W (X444)
R520	1-216-845-11	METAL CHIP	100K	5%	1/10W
R521	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R522	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R523	1-216-809-11	METAL CHIP	100	5%	1/10W
R524	1-216-809-11	METAL CHIP	100	5%	1/10W
R525	1-216-809-11	METAL CHIP	100	5%	1/10W
R526	1-216-809-11	METAL CHIP	100	5%	1/10W
R527	1-216-809-11	METAL CHIP	100	5%	1/10W
R531	1-216-845-11	METAL CHIP	100K	5%	1/10W
R532	1-216-845-11	METAL CHIP	100K	5%	1/10W
R534	1-216-833-11	METAL CHIP	10K	5%	1/10W
R535	1-216-845-11	METAL CHIP	100K	5%	1/10W
R536	1-216-845-11	METAL CHIP	100K	5%	1/10W
R537	1-216-845-11	METAL CHIP	100K	5%	1/10W (X204/X304/X444)
R538	1-216-845-11	METAL CHIP	100K	5%	1/10W (R304/X104EE)
R539	1-216-864-11	METAL CHIP	0	5%	1/10W
R540	1-216-864-11	METAL CHIP	0	5%	1/10W
R541	1-216-845-11	METAL CHIP	100K	5%	1/10W
R543	1-216-845-11	METAL CHIP	100K	5%	1/10W
R544	1-216-821-11	METAL CHIP	1K	5%	1/10W
R545	1-216-845-11	METAL CHIP	100K	5%	1/10W
R547	1-216-864-11	METAL CHIP	0	5%	1/10W
R548	1-216-845-11	METAL CHIP	100K	5%	1/10W (EXCEPT X104EE)
R549	1-216-845-11	METAL CHIP	100K	5%	1/10W (X104EE/X304:AEP,UK)
R551	1-216-845-11	METAL CHIP	100K	5%	1/10W (US,CND)
R552	1-216-864-11	METAL CHIP	0	5%	1/10W
R554	1-216-845-11	METAL CHIP	100K	5%	1/10W
R555	1-216-845-11	METAL CHIP	100K	5%	1/10W
R556	1-216-864-11	METAL CHIP	0	5%	1/10W
R557	1-216-809-11	METAL CHIP	100	5%	1/10W
R558	1-216-845-11	METAL CHIP	100K	5%	1/10W (EXCEPT R304)
R559	1-216-845-11	METAL CHIP	100K	5%	1/10W
R560	1-216-845-11	METAL CHIP	100K	5%	1/10W (US,CND)
R563	1-216-845-11	METAL CHIP	100K	5%	1/10W
R564	1-216-845-11	METAL CHIP	100K	5%	1/10W (AEP,UK)
R565	1-216-809-11	METAL CHIP	100	5%	1/10W
R566	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R567	1-216-833-11	METAL CHIP	10K	5%	1/10W (R304)
R568	1-216-845-11	METAL CHIP	100K	5%	1/10W (X104EE)
R571	1-216-845-11	METAL CHIP	100K	5%	1/10W
R572	1-216-845-11	METAL CHIP	100K	5%	1/10W
R573	1-216-864-11	METAL CHIP	0	5%	1/10W
R574	1-216-864-11	METAL CHIP	0	5%	1/10W
R575	1-216-845-11	METAL CHIP	100K	5%	1/10W
R576	1-216-845-11	METAL CHIP	100K	5%	1/10W
R577	1-216-864-11	METAL CHIP	0	5%	1/10W
R578	1-216-864-11	METAL CHIP	0	5%	1/10W
R579	1-216-809-11	METAL CHIP	100	5%	1/10W
R582	1-216-821-11	METAL CHIP	1K	5%	1/10W
R583	1-216-821-11	METAL CHIP	1K	5%	1/10W
R584	1-216-849-11	METAL CHIP	220K	5%	1/10W
R585	1-216-849-11	METAL CHIP	220K	5%	1/10W
R590	1-216-864-11	METAL CHIP	0	5%	1/10W
R591	1-216-809-11	METAL CHIP	100	5%	1/10W
R592	1-216-864-11	METAL CHIP	0	5%	1/10W (R304)
R595	1-216-833-11	METAL CHIP	10K	5%	1/10W
R596	1-216-864-11	METAL CHIP	0	5%	1/10W
R609	1-249-417-11	CARBON	1K	5%	1/4W
R631	1-249-425-11	CARBON	4.7K	5%	1/4W
R632	1-216-841-11	METAL CHIP	47K	5%	1/10W
R633	1-216-841-11	METAL CHIP	47K	5%	1/10W
R634	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R636	1-216-845-11	METAL CHIP	100K	5%	1/10W
R651	1-216-821-11	METAL CHIP	1K	5%	1/10W (AEP,UK)
R652	1-249-437-11	CARBON	47K	5%	1/4W (AEP,UK)
R653	1-216-833-11	METAL CHIP	10K	5%	1/10W (AEP,UK)
R654	1-216-833-11	METAL CHIP	10K	5%	1/10W (AEP,UK)
R701	1-249-401-11	CARBON	47	5%	1/4W
R731	1-249-417-11	CARBON	1K	5%	1/4W
R732	1-249-417-11	CARBON	1K	5%	1/4W
R733	1-216-834-11	METAL CHIP	12K	5%	1/10W
R734	1-216-834-11	METAL CHIP	12K	5%	1/10W
R735	1-216-820-11	METAL CHIP	820	5%	1/10W
R752	1-216-809-11	METAL CHIP	100	5%	1/10W
R756	1-216-841-11	METAL CHIP	47K	5%	1/10W

< SWITCH >

S702	1-692-431-21	SWITCH, TACTILE (RESET)

< TUNER >

TU1	A-3220-959-A	TUNER UNIT (TUX-032//Q) (EXCEPT X104EE)
TU1	A-3220-961-A	TUNER UNIT (TUX-032//Q3) (X104EE)

< VIBRATOR >

X51	1-813-173-11	VIBRATOR, CRYSTAL (8.664MHz) (R304)
X501	1-813-160-11	VIBRATOR, CERAMIC (27MHz)
X502	1-813-202-11	VIBRATOR, CRYSTAL (32.768kHz)

****

SENSOR BOARD

****

< SWITCH >

SW2	1-529-566-61	SWITCH, PUSH (1 KEY) (SELF)
SW3	1-529-566-61	SWITCH, PUSH (1 KEY) (DISC IN)

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SERVO

Ref. No.	Part No.	Description			Remark
	A-3283-339-A	SERVO BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C1	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C3	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C5	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C6	1-100-381-11	ELECT CHIP	10uF	20%	16V
C7	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C8	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C11	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C13	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C17	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C18	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C19	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C20	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C21	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C23	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C25	1-162-908-11	CERAMIC CHIP	3PF	0.25PF	50V
C26	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C27	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C28	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C29	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C30	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C31	1-162-925-11	CERAMIC CHIP	68PF	5%	50V
C32	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C34	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C35	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C36	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C37	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C38	1-104-609-11	ELECT CHIP	100uF	20%	4V
C39	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C70	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C71	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C72	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C73	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C74	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C75	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C76	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C77	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C78	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C79	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
		< CONNECTOR >			
CN1	1-817-275-21	CONNECTOR, BOARD TO BOARD 28P			
CN2	1-794-153-21	CONNECTOR, FPC (ZIF) 16P			
		< FERRITE BEAD >			
FB1	1-414-760-21	FERRITE, EMI (SMD)			
		< IC >			
IC1	6-703-699-01	IC uPD63712GC-8EU-A			
IC2	6-705-002-01	IC BA5966FP-FE2			
		< FERRITE BEAD >			
JR40	1-414-760-21	FERRITE, EMI (SMD)			
JR41	1-414-760-21	FERRITE, EMI (SMD)			
JR90	1-414-760-21	FERRITE, EMI (SMD)			
JR91	1-414-760-21	FERRITE, EMI (SMD)			
		< TRANSISTOR >			
Q1	8-729-904-87	TRANSISTOR 2SB1197K-R			
		< RESISTOR >			
R1	1-216-841-11	METAL CHIP	47K	5%	1/10W
R6	1-216-833-11	METAL CHIP	10K	5%	1/10W
R7	1-216-840-11	METAL CHIP	39K	5%	1/10W
R9	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R11	1-216-833-11	METAL CHIP	10K	5%	1/10W
R12	1-216-809-11	METAL CHIP	100	5%	1/10W
R13	1-216-833-11	METAL CHIP	10K	5%	1/10W
R14	1-216-797-11	METAL CHIP	10	5%	1/10W
R15	1-216-797-11	METAL CHIP	10	5%	1/10W
R41	1-216-821-11	METAL CHIP	1K	5%	1/10W
R42	1-216-821-11	METAL CHIP	1K	5%	1/10W
R44	1-414-760-21	FERRITE, EMI (SMD)			
R45	1-414-760-21	FERRITE, EMI (SMD)			
R70	1-216-842-11	METAL CHIP	56K	5%	1/10W
R71	1-216-833-11	METAL CHIP	10K	5%	1/10W
R72	1-216-842-11	METAL CHIP	56K	5%	1/10W
R73	1-216-833-11	METAL CHIP	10K	5%	1/10W
R74	1-216-837-11	METAL CHIP	22K	5%	1/10W
R75	1-216-833-11	METAL CHIP	10K	5%	1/10W
R76	1-216-837-11	METAL CHIP	22K	5%	1/10W
R77	1-216-833-11	METAL CHIP	10K	5%	1/10W
R78	1-216-833-11	METAL CHIP	10K	5%	1/10W
R79	1-216-833-11	METAL CHIP	10K	5%	1/10W
R80	1-216-833-11	METAL CHIP	10K	5%	1/10W
R81	1-216-833-11	METAL CHIP	10K	5%	1/10W
R82	1-216-837-11	METAL CHIP	22K	5%	1/10W
R83	1-216-833-11	METAL CHIP	10K	5%	1/10W
R84	1-216-837-11	METAL CHIP	22K	5%	1/10W
R85	1-216-833-11	METAL CHIP	10K	5%	1/10W
		< SWITCH >			
SW1	1-529-565-61	SWITCH, PUSH (1 KEY) (DOWN)			
		< VIBRATOR >			
X1	1-795-562-21	VIBRATOR, CERAMIC (16.9344MHz)			
**********					
		MISCELLANEOUS			
		**********			
7	1-776-206-21	CORD (WITH CONNECTOR) (POWER) (US,CND)			
7	1-776-527-61	CORD (WITH CONNECTOR) (ISO) (POWER)			(AEP,UK)
⚠153	8-820-207-02	OPTICAL PICK-UP (KSS1000E/K1RP)			
154	A-3372-448-A	CHASSIS (OP) SUB ASSY (including M901)			
FU601	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A			
M902	A-3372-447-A	MOTOR ASSY, SL (SLED)			
M903	A-3372-443-A	MOTOR ASSY, LE (LOADING)			
SW4	1-571-099-11	SWITCH (1 KEY) (LIMIT)			
**********					

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
		ACCESSORIES	
		**********	
	1-476-526-51	REMOTE COMMANDER (RM-Z304) (X444)	
	3-230-047-01	LID, BATTERY CASE (for RM-Z304) (X444)	
	3-263-358-11	MANUAL, INSTRUCTION (ENGLISH,FRENCH, SPANISH) (US,CND)	
	3-263-359-11	MANUAL, INSTRUCTION, FITTING (ENGLISH, FRENCH,SPANISH) (US,CND)	
	3-263-362-11	MANUAL, INSTRUCTION (ENGLISH,GERMAN, FRENCH,ITALIAN,DUTCH, SPANISH,POLISH,CZECH, HUNGARIAN,RUSSIAN) (X304:AEP,UK)	
	3-263-363-11	MANUAL, INSTRUCTION, FITTING (ENGLISH, GERMAN,FRENCH,ITALIAN,DUTCH) (R304/X304:AEP,UK)	
	3-263-363-21	MANUAL, INSTRUCTION, FITTING (SPANISH, POLISH,CZECH,HUNGARIAN,RUSSIAN) (R304/X304:AEP,UK)	
	3-263-364-11	MANUAL, INSTRUCTION (ENGLISH,GERMAN, FRENCH,ITALIAN,DUTCH, SPANISH,POLISH,CZECH, HUNGARIAN,RUSSIAN) (R304)	
	3-263-366-11	MANUAL, INSTRUCTION (ENGLISH,RUSSIAN) (X104EE)	
	3-265-261-11	MANUAL, INSTRUCTION, FITTING (ENGLISH, RUSSIAN) (X104EE)	
	X-3384-688-1	CASE ASSY (for FRONT PANEL)	

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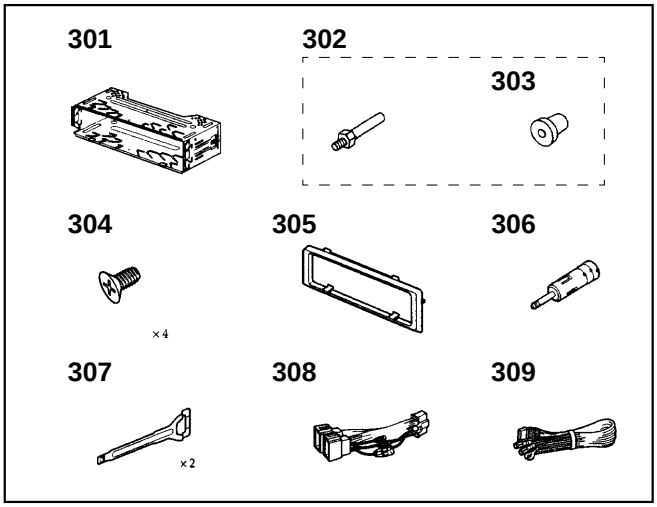
Ref. No.	Part No.	Description	Remark
		PARTS FOR INSTALLATION AND CONNECTIONS	
		**********	
301	X-3382-647-1	FRAME ASSY, FITTING	
302	X-3382-926-1	SCREW ASSY (BS), FITTING (AEP,UK)	
303	3-349-410-11	BUSHING (AEP,UK)	
304	3-934-325-01	SCREW, +K (5X8) TAPPING (US,CND)	
305	3-262-387-01	COLLAR	
306	1-465-459-31	ADAPTOR, ANTENNA (AEP,UK)	
307	3-246-471-01	KEY (FRAME)	
308	1-776-527-61	CORD (WITH CONNECTOR) (ISO) (POWER) (AEP,UK)	
309	1-776-206-21	CORD (WITH CONNECTOR) (POWER) (US,CND)	



REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2004. 01	New